

# AMAZING STORIES

A mechanical monster with a conical head and articulated limbs, set against a fiery, abstract background. The monster has a large, metallic, cone-shaped head with several small circular details. Its body is dark and angular, with jointed limbs. It appears to be standing on a rocky or uneven surface. The background is a swirling, abstract composition of reds, oranges, and yellows, suggesting fire or a storm. The overall style is reminiscent of pulp magazine illustrations from the 1930s.

April, 1938  
25 Cents

## THE MUSIC MONSTERS

by  
NEIL R. JONES

J. LEWIS BURTT  
JOHN RUSSELL FEARN



## Often the best man—never the groom

**EVERY** year he watched another of his closest friends get married. He envied them. It was bitter medicine to realize that he was still a bachelor; more than all else he wanted to "settle down." But one by one the girls who had attracted him, quickly dropped him to marry men with far less to offer. Arnold never knew why. That's the insidious thing about halitosis (bad breath): You yourself never know when you have it and the subject is so delicate that even your best friend won't tell you.

### *No Laughing Matter*

People no longer laugh about halitosis. Research has established this offensive condition as being so real, such an everyday threat, that only the ignorant and careless fail to take precautions against it. The fastidious, realizing it is the fault unforgivable, are continually on guard.

### *A Notable Deodorant*

There has always been one safe product especially fitted to correct halitosis pleasantly and promptly. Its name is Listerine, and it is the pleasantest tasting, most delightful mouth wash you can use.

Many imitations of it have failed either because they could not do what Listerine does; because they did not meet standard requirements for an antiseptic; or be-

cause they were too strong, too harsh, or too bitter to be tolerated.

Of the imitations that remain, a very large number lack Listerine's speedy action and efficiency.

For more than 50 years, Listerine has been used in hospital work because of its marked deodorant and antiseptic properties. When you rinse your mouth with Listerine Antiseptic here is what happens.

### *Four Benefits*

- (1). Fermentation of tiny food particles (the major cause of breath odors) is instantly halted.
- (2). Decaying matter is swept from large areas on mouth, gum, and tooth surfaces.
- (3). Millions of bacteria capable of causing odors are destroyed outright.
- (4). The breath itself—indeed, the entire mouth—is freshened and sweetened.

### *Don't Offend Others*

When you want such freshening and deodorizing effect without danger, use Listerine Antiseptic. Use it every morning and every night, and between times before business and social engagements, so that you do not offend.

LAMBERT PHARMACAL CO., St. Louis, Mo.

**For HALITOSIS use LISTERINE**



# HOW A FREE LESSON STARTED BILL ON THE WAY TO A GOOD RADIO JOB

I HAVEN'T HAD A RAISE  
IN YEARS -- GUESS I  
NEVER WILL -- I'M READY  
TO GIVE UP

BUCK UP, BILL, WHY NOT  
TRY AN INDUSTRY THAT'S  
GROWING -- WHERE THERE'S  
MORE OPPORTUNITY

MARY'S RIGHT -- I'M NOT  
GETTING ANYWHERE. I  
OUGHT TO TRY A NEW  
FIELD TO MAKE  
MORE MONEY

LOOK AT THIS -- RADIO IS CERTAINLY  
GROWING FAST -- AND THE  
NATIONAL RADIO  
INSTITUTE SAYS THEY  
TRAIN MEN FOR RADIO  
RIGHT AT HOME  
IN SPARE TIME

I DON'T THINK I COULD LEARN  
RADIO THAT WAY -- BUT THEY'LL  
SEND ME A SAMPLE LESSON  
FREE. GUESS I'LL  
MAIL THE COUPON  
AND LOOK INTO  
THIS

## Find out how practical it is to Train at Home for a Good RADIO Job I'll send a sample lesson FREE

SAV -- THIS WAY OF LEARNING IS GREAT. I'M  
GOING TO ENROLL. THEN I CAN BE A SET  
SERVICING EXPERT -- OR GET A JOB IN A  
BROADCASTING STATION -- OR  
INSTALL LOUDSPEAKER  
SYSTEMS. THERE ARE A  
LOT OF GOOD MONEY-  
MAKING OPPORTUNITIES  
IN RADIO

**J. E. SMITH, President  
National Radio Institute**  
Established 1914

FREE. Examine it, read it, see how easy  
it is to understand even if you've never  
had any technical experience or training.

### Many Radio Experts Make \$30, \$50, \$75 a Week

Radio broadcasting stations employ en-  
gineers, operators, station managers and  
pay up to \$5,000 a year. Spare time Radio  
set servicing pays as much as \$300 to  
\$500 a year. Full time Radio servicing  
jobs pay as much as \$30, \$50, \$75 a week.  
Many Radio Experts own and operate  
their own full time or part time Radio  
sales and service businesses. Radio man-  
ufacturers and jobbers employ testers, in-  
spectors, foremen, engineers, servicemen  
paying up to \$6,000 a year. Radio opera-  
tors on ships get good pay, see the world  
besides. Automobile, police, aviation, com-  
mercial Radio, loud speaker systems of-  
fer good opportunities now and for the  
future. Television promises many good jobs  
soon. Men I trained are holding good jobs  
in all these branches of Radio.

### Many Make \$5, \$10, \$15 a Week Extra in Spare Time While Learning

Almost every neighborhood needs a good  
spare time serviceman. The day you en-  
roll I start sending Extra Money Job  
Sheets showing how to do Radio repair  
jobs. Throughout your training I send  
plans and ideas that made good spare  
time money for hundreds. I send Special  
Equipment to conduct experiments, build  
circuits, get practical experience. I GIVE

YOU A COMPLETE, MODERN, PRO-  
FESSIONAL ALL WAVE, ALL PUR-  
POSE RADIO SET SERVICING IN-  
STRUMENT TO HELP SERVICE SETS  
QUICKER -- SAVE TIME, MAKE MORE  
MONEY.

### Get My Lesson and 64-Page Book FREE. Mail Coupon.

In addition to my Sample Lesson, I will  
send you my 64-page Book, "Rich Re-  
wards in Radio." Both are free to any  
fellow over 16 years old. My book points  
out Radio's spare time and full time op-  
portunities and those coming in Television;  
tells about my Training in Radio and  
Television; shows my Money Back Agree-  
ment; shows letters from men I trained,  
telling what they are doing and earning.  
Find out what Radio offers YOU! MAIL  
THE COUPON in an envelope, or paste  
it on a penny postcard -- NOW!

J. E. SMITH, President  
National Radio Institute, Dept. 6CM  
Washington, D. C.

THIS  
FREE BOOK  
HAS HELPED  
HUNDREDS OF  
MEN MAKE  
MORE MONEY

RICH REWARDS  
IN RADIO

YOU SURELY KNOW  
RADIO. MINE  
NEVER SOUNDED  
BETTER

THANKS, I'VE BEEN STUDYING  
ONLY A FEW MONTHS AND  
I'M ALREADY MAKING  
MONEY IN  
MY SPARE  
TIME. THAT'S  
NO EXTRA  
THIS WEEK

OH BILL, I'M SO GLAD  
YOU SENT FOR THAT  
FREE LESSON AND  
PROVED TO YOUR-  
SELF THAT YOU  
COULD LEARN  
RADIO AT HOME

YES, I HAVE A GOOD  
FULL TIME RADIO  
JOB NOW -- AND A  
BRIGHT FUTURE  
AHEAD IN RADIO

J. E. SMITH, President, Dept. 6CM  
National Radio Institute, Washington, D. C.

Dear Mr. Smith: Without obligating me, send the simple lesson and your  
book which tells about the opportunities in Radio and your 50-50 method of training  
men at home to become Radio Experts. (Please write plainly.)

NAME.....AGE.....  
ADDRESS.....  
CITY.....STATE.....ZIP.....

MAIL THIS NOW

# AMAZING STORIES

## *Science Fiction*

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Vol. 12

APRIL, 1938

No. 2

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Over 350 more men and women are needed at once to open fine-paying Coffee Agencies right in their own home localities. A wonderful chance to make as high as \$60.00 in a week, *starting at once*. No past experience needed. This company will send you everything you need and give you all the help you require. You risk no money. Mail this application if you want to know whether your own or nearby locality is open. No obligation—you decide after you read the plan.

Name \_\_\_\_\_  
(State whether Mr., Mrs., or Miss)

**1** Write Your  
Full Name  
and Address  
Here

Address \_\_\_\_\_

City and State \_\_\_\_\_

**2** How Much  
Time Can You  
Devote to  
Coffee Agency?

Mark with an "X"  
☐ FULL TIME; ☐ PART TIME

[Full time pays up to \$16 to \$20 in a week. Part time, either during the day or evenings, pays up to \$12.50 in a week.]

**3** State Which  
Bonus You  
Prefer—Cash  
or Ford  
Automobile

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☐ \$500.00 CASH BONUS; ☐ LATEST MODEL FORD TUDOR SEDAN

**4** Can You  
Start at Once?

Mark with an "X"  
☐ YES; ☐ NO

If you cannot start at once, state about when you will be able to start.  
\_\_\_\_\_

**All  
Applications  
Will Be Held  
Strictly  
Confidential**

## SEND NO MONEY

No money fee is required with this application. It merely tells us that you would consider running a Coffee Agency in your locality if we have an opening for you. There's no obligation. You will be notified by return mail whether your home locality is available. Then you can decide if the money-making possibilities look good to you. A chance to be independent, work as you please, and make more than just a modest living. Those who apply first will be given preference, so mail your Application without delay. No letter is required, just the Application. Mail at once—NOW!

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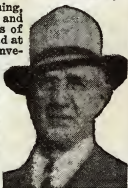
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Mr. R. M. Wallenburg  
R. M. Wallenburg, 225 Commerce Ave., S. W.,  
Grand Rapids, Mich.

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"We hereby certify that we have tested OVRHAUL, UNDER WORKING CONDITIONS—1925 Ford's driven 22,000 miles. TOTAL GAIN in compression 22 lbs. (nearly normal according to manufacturer's specifications). OVRHAUL does not scratch, abrade or otherwise injure the motor. The "pick-up" speed and hill climbing performance were increased FORTYFOUR PER CENT. One runs great, finally as well as when new."

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City..... State.....

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Radio Div., COYNE ELECTRICAL SCHOOL  
500 S. PAULINA ST., Dept. 38-SE, CHICAGO, ILL.

-----

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Radio Division, Coyne Electrical School,  
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Name .....

Address .....

City ..... State .....

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28x4-60	2.40	30x4-60	2.40
28x4-62	2.40	30x4-62	2.40
28x4-64	2.40	30x4-64	2.40
28x4-66	2.40	30x4-66	2.40
28x4-68	2.40	30x4-68	2.40
28x4-70	2.40	30x4-70	2.40
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28x4-78	2.40	30x4-78	2.40
28x4-80	2.40	30x4-80	2.40
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30x4-58	4.25	30x4-58	4.25
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30x4-80	4.25	30x4-80	4.25
30x4-82	4.25	30x4-82	4.25
30x4-84	4.25	30x4-84	4.25
30x4-86	4.25	30x4-86	4.25
30x4-88	4.25	30x4-88	4.25
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VOLUME  
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No. 2

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*Extravagant Fiction To-day . . . . . Cold Fact To-morrow*

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## Modern Printing Methods

By T. O'CONOR SLOANE, Ph. D.

**I**N former times when type were cast one at a time by a workman, he would cast if he was capable three thousand or four thousand in a day. A page of *Amazing Stories* contains about 2500 letters, so it would require the greater part of a day to cast one page of letters for this magazine. Hand-casting is practically extinct. Type are now cast by mechanical processes. A sort of claim may be made that we have improved our methods to the point of the abandonment of type for most of printing. The linotype, which has achieved a monumental success in the last years, delivers the matter for the press in the shape of single one piece lines of type, all the letters in a solid row. This feature is undoubtedly the origin of the name. It is an instance where a descriptive name is formed from words in our own language; there was

no recourse to Latin for its naming.

There are several features about linotype work. If a wrong letter has been set and has passed into the final text, the only way to correct the misprint is to do the whole line over and substitute it for the defective one. In regular type-printing only one letter has to be changed—in linotyping the complete line has to be cast correctly. But so rapid is the operation of the linotype that it will often take less time to do the line over again, than it would to pick out a single type in type-printing and put another in its place. The operation would in most cases involve the adjustment of the quads.

So to an extent modern printing has abandoned type and printed from groups of letters. And the curious thing about this is that it represents an incomplete return to the work of

ancient days, as linotype printing is analogous to the old block printing of the Chinese. Where they laboriously engraved a full page by hand, the linotype does the page one line at a time and with these lines builds up a page ready for the press or for stereotyping or for electrotyping.

In the days of Benjamin Franklin books were printed from type. There was no stereotyping of a page of type. The printer would keep at the typesetting until a number of pages were in type and from these the book would have a set of pages printed. This might use up all the type in the office, when the type would have to be distributed each into its proper compartment and the next lot of pages would be put in type. The effect of this feature was that if a second edition was called for all the work had to be done over again. But now owing to processes of reproduction, mechanical in stereotyping and electrical in electrotyping, if a book sells unexpectedly well, it can be reproduced in short order if it has been stereotyped or electroplated. But in a sad number of cases the reprinting from the carefully prepared plates is not called for. Best sellers are all too few.

In type-setting, the operative has before him a case divided into compartments, one for each letter, quad-rat and character. The collection includes capitals and small letters, called upper case and lower case type respectively. The terms universally used, refer to the position of the cases holding the type. The great majority of type are the small letters, capitals are much less used. Therefore the small letters are placed in the sections of the case nearest to the printer, because the majority of his work is the setting of the smaller letters and as the case devoted to them is lower than

the case holding the capitals, the terms "upper case and lower case" are used to designate the two classes of type. The usual proofreader's indication for small type is l.c. meaning lower case. But the corresponding term for capital letters is "Cap—" one would expect it to be u.c. but it is not usually so designated.

The old time proofreader was an acknowledged character in the world of printing. His relations with the author were peculiar and extremely variable. His duty was to correct the printers' errors. These might be in the spelling or setting the wrong letter. But the old-time proofreader, as far as he was permitted, did much more than this. He watched for every kind of error, and, if he found the author going wrong in any way, he would note the error on the margin of the proof with an interrogation mark after it, leaving the final decision to the author. It would not matter whether he was sure of himself or not, and he generally or nearly always was sure, the interrogation mark would be there. Authors are of all kinds, and do not always realize that the printers and authors have a friend and ally in the proofreader. But we sometimes feel as if the authors' best friend, the proofreader, is extinct. The old time proofreader, that we read about we sometimes feel is no more. Many stories are told by older printers of the ways of authors, who perhaps would resent what they would very foolishly consider interference of the proofreader, because they did not know or did not admit that he was right and they were wrong. But when an editor finds in the corrected text the word "escapement" of a mountain instead of the "escarpment," he is justified in doing some thinking of his own about

printers' blunders and errors. It sometimes happens that the proof-reader keeps an author out of an error, such as a misquotation. Then the author has a chance to appreciate real assistance.

In hand typesetting one of the operations is "justifying." A line of type must end with a completed word or with a syllable and a hyphen following it. This is done by putting in little slips of typemetal, "quadrats" or "quads," between the words. This is simple enough but it takes time. To save trouble a word in a short line will sometimes have quads put in between all the letters so as to spread it out and make it take more space. This is very poor practice and is reminiscent of German printing, for the German printer does this wide spacing to emphasize, and the wide spacing represents our italics.

When the linotype first appeared on the scene its most novel feature was that instead of using type it cast a line of type at a time and this feature suggested the name. It is a complicated machine. It carries a quantity of matrices of the letters of the alphabet. There is a keyboard resembling the corresponding feature of a typewriter. The printer sits in front of its keyboard and operating like a typist causes the matrices to take their positions in the line. Between the words duplex wedges are placed and as the end of the line is approached these are made to fill the line by increasing the spaces between the words. The printer has to take care of the division of words into syllables when it has to be done at the end of the line. But all this is done at the keyboard, the operator never needs to leave his seat. In the operation of the almost huge machine a single line of matrices, the reverse

of type is produced. A pot of melted type-metal is part of the apparatus. When the line is complete in the form of matrices, the space above them is filled with the melted alloy by the operator. Everything requisite in the way of trimming is done by the machine, and the "slug," as it is designated goes on its way to do its part in making the form for the page or other division of the matter to be printed. The linotype is almost a huge machine but its work is the production of little castings, of any desired length, often less than two inches long, and of all sorts of type faces according to the matrices in the machine. The operator may not seem to hurry, he probably does not, for, as in many other things, hurrying is not productive of results. The spacing between words on the linotype is done by forcing two wedges facing each other between matrices. This arrangement separates the matrices and prevents the lead, as the alloy is often called, from pouring out through spaces between words.

The contrast between the massive machine and its product is impressive. Little slugs an inch or more in length, it may be of small type letters or of large according to the matrices on the machine, are produced. The change from one set of matrices to another is quickly done. The linotype now has a great variety of matrices, only a few in each set, representing and doing the work of any quantity of type. When a slug is cast the matrices are returned to their places by the machine, so that a very small number is all that is required for any number of pages. Printing type wear out and may be said to start deterioration from the first impression. But the matrices last forever for they are not subject to wear.



The earliest printing, as far as is known, was block-printing, where all the letters or characters for a page were laboriously carved out, engraved we may call it, on a smooth wooden block from which the impressions were taken. Type came next, and then the idea occurred of making a casting in type metal from the form of set type. Often this would be done in single pages. The impression of the type would be taken in plaster or papier maché, and from this a casting called a stereotype, of the form of type would be made. It is a sort of return to block printing.

Electricity is very extensively used to obtain such plates. The form of type is heated and pressed into wax in a tray. The wax is made conductive by dusting it over with graphite and iron dust. This was used to give a reproduction and gave what was termed an electrotpe.

Electrotypes and stereotypes were mounted on wooden blocks and were printed from. All this is a mere outline. It would take many pages to tell the whole story.

If we go back to the early days of printing and consider what the linotype has done in the printing world, we would be justified in asserting that it had revolutionized printing. One does not need to be a printer to produce printed work. There is no need for him to study and practice typesetting, which is not an easy operation to learn, if you wish to do it rapidly. A font of type is needed, which can be a small one if the work is constantly stereotyped, a little at a time. But with the linotype much of the above is dispensed with. In the first place there is no font of type to be provided. A full font may weigh a thousand pounds or more. But the linotype gives the form to the

printer in type-high lines, and all the setting that is needed is to put the slugs or lines of type on an imposing stone and after fixing them in the form to start printing. It is only to refer to human nature to affirm that the linotyper will be glad to have the work stereotyped or electrotyped so that he can recover his metal, but that will be a matter of regulation between the two parties. The impressive feature is that a book can now be printed and most of them are, without using the invention of Gutenberg, the individual type for each letter.

But there are rivals of the linotype, some of which set single type, which is cast letter by letter and set in lines ready for the press or for reproduction by process to give plates of solid metal. These are to be mounted on blocks of wood to give them proper height—to make them “type-high” as the printer terms it. The same has to be done with stereotypes or electros.

The compositor or linotyper is supposed to spell our rather eccentric language correctly. His work is or should be followed up by the proof-reader. But curious errors in spelling will escape the best of them. Then the author or editor, as the case may be, can write on the page he has corrected or revised:

I wonder if you ever look  
In Noah Webster's spelling book.

If the linotype instead of casting lines of type casts single type, it would seem more like the original hand printing. Many attempts could be cited of setting type mechanically one at a time. When this was successful to a very limited extent another difficulty arose. The type when their work was done had to be distributed and this was one of the great difficulties the

early inventors encountered. But this trouble was solved by a very simple conception. It was to cut loose from the idea of using type to start with, but to cast every type by the machine. This would give a new set of type cast specially for every piece of work, great or small. And it is this thing which the monotype does. It is quite extensively used. It involves two phases. The first thing to be done is to perforate a long band of paper with a rather complicated set of apertures. These are quite small and are arranged in two sets, one above the other. Melted type metal is fed to the machine and type are cast from it one by one, their casting and setting being controlled by the paper bands. There was no attempt made to describe the wonderfully ingenious mechanism of the linotype, and the

attempt to describe the monotype would be still further remote from the limits of this text. It is most interesting to watch the monotype when in operation. One by one the type appear each going to its place, the working of the machine is seen in its results, which is more than can be said for the linotype, where the first thing to be seen is the finished line of type, a slug as it is called, ready to take care of a complete line.

There are other machines in use, but the two referred to are given to exemplify two separate and distinct modes of mechanical typesetting, one producing the line of type whence its name is derived the other casting single type and putting them in order and correctly spaced. It is a single type machine and the name Monotype is supposed to tell this.

## Science Questionnaire

1. What was the old system of book printing? (*See Page 10*)
2. How is the greater part of printing done? (*See Page 10*)
3. What is the origin of the name Linotype? (*See Page 10*)
4. Can modern printing be assimilated to Chinese block printing of ancient days? (*See Page 11*)
5. What was the inconvenience of old time printing from type? (*See Page 11*)
6. How did the old-time proofreader help the author? (*See Page 11*)
7. What can be said about the relative size of the linotype and of its products? (*See Page 12*)
8. How is spacing done on the linotype? (*See Page 12*)
9. What are electrotypes and stereotypes? (*See Page 13*)
10. What is the distinguishing feature of the monotype? (*See Page 14*)
11. What relationship can be drawn between the quality of the blood and the brain? (*See Page 73*)
12. What were the relations of primitive man to the dinosaurs in defending himself? (*See Page 91*)
13. What is the velocity of the motion of the moon? (*See Page 101*)
14. What is the name of the inner and larger moon of Mars? (*See Page 102*)
15. What is the name of the outer and smaller moon of Mars? (*See Page 104*)
16. What effect would follow if a body travelled faster than light? (*See Page 131*)

# The Music-Monsters

By NEIL R. JONES

*Another Jameson story is well introduced by the cover picture of this issue. One of the mysterious creations of the author's mind is carefully studied out by the artist. This installment will be found to be as good as the preceding ones.*

## CHAPTER I

### DEMONS OF THE INFERNO

A **P**ILLAR of angry flame leaped skyward, tinting the swirling crêpe of surrounding smoke and obscuring the figure which groped its way through the inferno. Above lay darkness, the glitter of the stars softened by the palls of rose-tinted smoke. The curtain lifted, and again the figure became visible, this time in the act of leaping over a glowing crevice. Escape appeared hopeless, for as far as the eye could see, and the vision was more or less limited, lay the smoldering, glowing fields of volcanic terrain. Acrid smoke spread the lurid glow more evenly over the darkened, partly-cooled surfaces from the heated rivulets and white-hot lakes of fire.

That organic creatures could survive this desolation and fiery menace for a minute seemed impossible. A missed step plunged a foot of the wanderer into a glowing hollow from which it was hastily withdrawn as a drifting pall of smoke once more enveloped the vicinity. What manner of creature was this who could venture so carelessly a lower limb into a red hot cauldron, withdraw it apparently unharmed and stand placidly waiting for the smoke veil to rise or pass that he might see his way the better?

The smoke disappeared slowly,

leaving the standing figure haloed in a hellish glare from which his appearance became more definite as the filmed veil drifted away. He was a machine man, a thing of metal. Apparently, unless his parts heated to the melting point, he had nothing to fear. This was not so, for despite the temperature equalizer which fitted so closely down over his metal-coned head, 6W-438 still lay in dangerous prospect of becoming a victim of the intense heat.

For one thing, his metal-coned head with its circle of eyes and single, upward-staring, mechanical optic in the apex housed an organic brain. 6W-438 was a Zorome, a cosmic wanderer from the distant world of another star. The Zoromes had long ago mastered the secret of semi-immortality by the removal of their brains from organic bodies to the machines, the heads of which were fitted to supply all the energies and rejuvenation, not to mention the eliminations of waste, requisite to an organic brain. Their semi-immortality was all too significant of the fact that, although impregnable to the lesser causes of death-afflicting organisms, they were nevertheless pervious to destruction.

**W**ANDERERS of the cosmos, they roamed from sun to sun, exploring their planets for romance and adventure of which space-

travel offered the most glamorous, the most ultimate. Secondly, 6W-438 was not so secure from the heat as he looked to be, despite the temperature equalizer, for the apparatus, though functioning to perfection by supplying the necessary heat in space, did not do quite so well in reverse as a cooling system, though even in this latter respect its performances were remarkable.

The machine man of Zor made no move to continue as the smoke lifted, but stood there firmly upon his four metal feet, his six tentacles of the same material swinging aimlessly from the cube of his metal body. Telepathic thoughts groped through the hell behind him and communed with the unseen. Patiently he stood there as if waiting, and then, dimly at first, more machine-men appeared and came to join him. Still more of them came, a few of them helpless and carried by their companions, their feet and legs strangely warped as if subjected suddenly to terrific heat. Others were unconscious, the heat having finally reached and overcome their brains. These latter had their heads detached from their metal bodies, the heads held high in curled tentacles by companions, that they might absorb no more heat and stand a better opportunity of losing that which they had already gathered.

"10B-33 is dead!" 12W-62 exclaimed. "He fell into a lake of fire back-a-ways! We could do nothing to help him, though 7H-88 melted part of a tentacle away reaching for him!"

"777Y-46 nearly went in, too," 41C-98 supplemented his companion, "but we caught him in time."

"The ground was undermined at the lake's edge," 21MM392 explained.

The final stragglers appeared, and there were sixteen in all assembled

on the cooled knoll where 6W-438 had waited.

"If the space ship dared only land here we might be out of this place safely," said 8L-404. "But 20R-654 does not dare bring it down in here."

"Nor do I blame him."

"Had it not been for the fire-dwellers, we should not have penetrated so deeply into this volcanic country."

"Have you seen them lately?" queried 6W-438.

"No," 119M-5 replied. "We must have shaken them off when we waded through the river of flaming lava. As adapted as they are to the conditions of this place in which they live, even then they dared not duplicate our feat. After all, beneath their thick, asbestos-hidden skins, they are organic, and there is a limit to their invulnerable aptitude to fire."

"Whoever would have believed that we should have found organic life here in this fire country? We have found strange creatures and strange conditions on this planet fragment, but this has anything beaten yet."

"How do these things live?"

"How did the ohhs live?" countered 41C-98, referring to the denizens of another planet in a distant system recently visited by the machine men. "They were organic."

"They ate metal—but you don't believe these things live by absorbing metal?"

"What about fire?"

"Not exactly," said 6W-438, "but the reference to their sustenance on fire approaches a growing theory of mine quite closely. Do you know what I believe they utilize for food?"

"What?"

"From all we have witnessed, none of us have been able to distinguish a mouth, yet a brief examination of one 21MM392 killed in combat showed

an elaborate assortment of ventricles, or nostrills. I believe that they subsist on the sulphurous fumes of the smoke. We have often found them standing motionless and relaxed in dense clouds, and that was one reason we blundered upon them when we might have avoided them."

"We should have brought weapons," advised 119M-5.

"But who expected we would need them here?" asked 92ZQ153. "Instead, we brought the more obvious articles we might use, the temperature equalizers."

"And they have stood us in good stead."

"21MM392 has the only weapon among us, his heat ray built into a fore tentacle."

"If the space ship comes low enough, we can order those aboard to drop us weapons."

"We may not need them. The fire-dwellers are behind us. They cannot cross the river of fire as we did—to the detriment of many of our metal legs. Besides, the heat rays seem to have little effect upon them unless we are able to concentrate long enough on one particular spot."

"They may find a way of getting to us again, and how do we know but what there may be some of them on this side of the river we crossed?"

"Now that we have lost 10B-33, 744U-21 may find a way to lower a cable to us from the space ship by which we might climb up or be hauled up," suggested 21MM392. "He spoke of it when we were last in contact."

"That was since we escaped the fire-dwellers. Two nights and a day have passed since then."

"What savage brutes they are. They picked up red-hot rocks and threw them at us."

"They constitute more of a menace to us than did the Ooours, at least under these circumstances," opined 27E-24. "It is more or less synonymous with their great strength that they should live upon the antipode of the Land of Exhaustion. Both sides are of equal gravity."

Standing together, there was nothing by which to distinguish them as the cosmopolitan crew they were. Sixteen in number, twenty-two of their companions, the remainder of the expedition under the joint leadership of 744U-21 and 21MM392, were with the space ship. 21MM392 was a convert to the metal ranks, having been resurrected from a death lasting forty million years. Once, he had lived upon the planet earth, now a desolate, dead and motionless sphere, nearly devoid of an atmosphere. He had been known as Professor Charles W. Jameson, a man secretly absorbed in the old practice of the Egyptians, the enduring semblance of the dead. But he had avoided embalming and the other artifices of morticians. His had been a glorious revelation, a burning inspiration which had driven his intellect to the construction of a space rocket large enough to contain his dead body and the necessary radium propellants to carry it beyond the earth's attraction. On his death, a nephew had followed his instructions, as he had left them, and the professor in his cosmic coffin had become a satellite of the earth, his body secure from disintegration in the vacuum of space.

IT was forty million years after, that an expedition of the Zoromes came upon his rocket satellite circling the dying earth. They stimulated his brain to activity and placed it in one of their machines. Recalled to life,



Professor Jameson joined in their adventures from star to star.

Then there was 92ZQ153, whose companion-converts, 5ZQ35 and 454ZQ2, were at present aboard the space ship. They had once been triped creatures on the planet of a double sun and known as Ravlt, Glrg and Jbf. The expedition eventually returned to Zor after many adventures and explorations on planets of systems visited on the way home. After a sojourn on Zor, which included a space war with the Mumes of a neighboring system, Professor Jameson and 744U-21 had organized another expedition. Members of the old expedition other than those just previously mentioned comprised 6W-438, 41C-98, 20R-654, 29G-75, 6N-24 and 47X-09. All the others were new to the old guard, and two of these, 12W-62 and 119M-5, had been lovers on the planet Zor and had been known as Bext and Princess Zora of the Zoromes. Bext had been killed in battle with the Mumes, his head immediately recovered and brought back to Zor where it was revived, even as in the case of Professor Jameson, and placed in a machine. In this manner, Bext had been involuntarily transformed to a machine man. In the case of Zora, however, the act had been deliberate. It was her only escape from the grief of lost love. Strangely enough, yet all too logical when considered, with their change to the machines vanished the essence of their love, and they were now but friendly companions, two machine men of Zor.

Since leaving Zor, the expedition of the Zoromes had experienced several noteworthy adventures, their latest on the planet fragment, where they had found an odd-shaped world like a giant slab, possessing a length

of twenty-three thousand miles, a width of fourteen thousand miles and a breadth of four thousand miles. After exploring one side of the slab, they had turned their attentions to another of the sides and found a region of fire country on one of the facets of fourteen thousand miles depth. That they had discovered the unexpected and were forced into an unforeseen dilemma is already apparent.

"Are we certain we are travelling in the same general direction?" asked 6W-438. "Otherwise we may never find our way out of this wretched place."

"We have pursued pretty well the same direction, especially at night," said the professor. "I have watched the stars from time to time, keeping one constellation in sight since our escape from the fire-dwellers. When detours around the lakes of fire have taken us on a tangent, we have always swung back again."

"Then we are bound to come out, for though this volcanic country is quite extensive it does not possess unreasonably far boundaries."

"Let us push on again," urged 41C-98. "When dawn comes, we may sight the space ship again, and they can tell us where we are."

"The last time we contacted them, we were near the center of this fiery morass."

THE machine men left the little dark knoll upon which they had stood crowded together and plunged once more into lurid, apocalyptic nightmare, skirting yawning, smoking crevices, pools of molten lava and avoiding them as distantly as possible. Gaping fissures they often leaped in spite of dangerous, crumbling sides which threatened to pre-

cipitate them into the glowing residue at the bottoms. When veils of smoke enshrouded them, they halted, for a false step meant death. Their lower limbs grew intensely hot, creeping heat reaching slowly up to their metal, cubed bodies. It was often necessary for them to wade through shallow pools of glowing lava; there was no other way. When heat threatened to creep up through the metal bodies to the vulnerable brain in its protected cone and temperature equalizer, they were hoisted in strong tentacles above the head of a companion who carried them while they partly cooled off in the absence of contact with the hot ground which they monotonously travelled.

With a lightning on the horizon, the hellish glare of the waste lands became less. The machine men paused in the path of a dense cloud of yellowish, acrid smoke which rolled down upon them in a billowing cloud. They waited for it to roll onward, that they might be sure of where they walked. Near the center of the subdued conflagration, where they had found most of the fire-dwellers, the walking had been less hazardous, for the ground had been less hot and the fire cauldrons there more rare. They had kept on through blinding smoke, but here they dared not risk themselves to chance. The crevices were many and deep, and the reflected glare in the smoke camouflaged any appearances of a glowing trap, for in the smoke it always appeared as if they were in the center of a fiery pit or else near by one. They could only be patient and wait upon the vagaries of the source of the smoke or the air currents which directed it.

The smoke pall clung tenaciously, seemingly reluctant to clear away, and during that time the professor

realized that with another day soon to break he would lose sight of his guiding star. The rotation of the planet fragment presented a strange, solar aspect, and often it was difficult to diagnose directions from the position of the sun. Dawn and twilight were usually drawn-out affairs, for the elongated planet was of such a nature that the sun shone crosswise of the atmosphere on two or more facets all the time. The equator of the rotating fragment girdled it nearly diagonally, so that portions received varying amounts of sunlight. Added to this, the inclination of forty-seven degrees gave it a procession of seasons on its orbit. Being close to the sun, the great fragment revolved rapidly, so that the seasons passed quickly and afforded but little opportunity for temperature contrast. From an earthly standpoint, the climate was very hot as the professor knew, but compared to the place they were in now, the general climate of the misshapen planet was that of a veritable polar cap.

The cloud of smoke thinned, and the professor saw his metal companions about him as in a dream haze of subconsciousness. And then he saw something else ahead of them, where the smoke was still dense. There was a scarcely perceptible movement in the depth of the dissipating smoke which set in action a vague, uneasy suspicion among the machine men grasped with the flash of thought from that one keen observation of Professor Jameson. The smoke thickened. They saw nothing more for several minutes. Then magically, the smoke cleared away. Before them more than a score of the fire-dwellers threw off their lassitude at sight of them. Mute, they made no sounds. Silently, they set about their



*Other than occasional resort to hurling chunks of rock at the machine-men, the fire-dwellers were weaponless.*

grim impulses, with which the machine men were already quite well acquainted.

Other than occasional resort to hurling chunks of rock at the machine men, the fire-dwellers were weaponless. They were nearly as large as the Ooours and as strong. The environment of superior gravity was responsible for this. In no way did they resemble the Ooours unless their four lower appendages could be likened to those of the antipodes' inhabitants, but, as for the feet, even this slight resemblance became contrary in detail.

THE feet were much like those of a horse, the professor had previously observed, the hoof built high into the leg and consisting of a hard, heat-resisting growth.

That, too, bespoke adaptation to environment. The four legs supported a bulky, headless body, headless if a neck is necessary to constitute a distinction, yet a whale has no neck. Neither had the fire-dwellers, but no further did their resemblance liken itself to the earthly cetacean. Four deeply-set eyes in diamond formation occupied the face. To afford side-ward vision, this number was necessary in their circumstances, for those two in vertical formation were, like the other two, too deeply set to afford other than a straight, limited vision, and all four of the optics were protected in emergency by hard, bony lids. The upper appendages were also four in number, two on each side of the huge, ovoid body, ending in crab-like claws of the same substance as the hoof material. With these claws,

it was remarkable how dextrously they were able to seize and hurl red hot chunks of rock.

In color, these veritable Lucifers of the fire country ranged from dark slate to pale green, their hide of a thick, tough substance impervious to any heat other than the brightly glowing lakes of fire from which the machine men had seen them stay clear. The things possessed no mouths, but their entire body, with the exceptions of their eight appendages, were set with some hundred or more perforations through which they evidently breathed, somewhat supporting the theory of 41C-98 and 6W-438 that the fire-dwellers gained sustenance from the acrid smoke of the volcanic terrain.

The machine-men already knew the battling tactics of the fire-dwellers who snapped and tore with their claws and pushed their opponents into the nearest fissure or molten pond handy. They were evidently versed in the art of combat; but why, the machine men had yet to discover, unless they battled with each other, for no other creatures occupied this desolate, burning expanse, and it had been argued unlikely that they ever left the fire country. Enabled by nature to stand the intense heat in which they lived, it was by general axiom that lower temperatures must prove fatal to them. On these latter points, the machine-men were uncertain.

Fearlessly and in silence, the fire-dwellers charged the metal invaders in their infernal domain, and equally as fearlessly and as silently the machine-men resisted the attack of their towering adversaries. For once, the professor's heat ray was more or less of a total loss. No brief sweep or limited concentration on the fire-dwellers had any effect, and the latter were

far too active to permit a prolonged focus upon any one part of their anatomy.

Now, in a vicious avalanche, they launched their ponderous bulk upon the lost machine-men, like veritable Lucifers out of Hades. Metal tentacles came to grips with rough-skinned arms, possessing an epidermis thicker and more callous than that of the pachyderms which Professor Jameson could recollect of his planet earth.

"Look for an opening to dash through!" cried 6W-438. "We must try and keep to our original direction!"

"There are none! More of the things are coming!"

"They are closing up!"

"Here—this way!" 41C-98 discovered that the horde of the fire country were massing on one side of them and coming forward like a mighty, irresistible wall of brute strength. "Run this way! We may be able to wade another river of fire and elude them!"

IN truth, the fire-dwellers had lost any chances they might previously have had of surrounding the machine men, for they were massed to one side. 12W-62, standing nearest them, stood his ground and resisted them momentarily, swinging his lashing tentacles viciously into the approaching fire-dwellers, slashing and cutting obtuse wounds in their tough epidermis but otherwise wreaking little havoc. One of them seized him and threw him far to one side, where he splashed in a little pool of red-hot lava. Quickly, 12W-62 extricated himself and caught up with his slowly-retreating, metal brethren. The fire-dwellers did not seem anxious to catch up with the machine-men. That they were the same band that had attacked them before, the machine-men

were positive, for their actions betokened experience. The fire-dwellers appeared content to keep the machine-men moving in one direction.

In this, the professor, though according the creatures of no great intelligence, recognized a subtlety probably instinctive. Why were they being herded this way instead of being promptly attacked as before? Of course, the fire-dwellers had not fared so well themselves, for many of their number had been hurled into the lakes of fire where their tough, asbestos skin had availed them no protection whatever.

## CHAPTER II

### THE LAKE OF FIRE

**T**URN to the left when we reach this rise," the professor told his companions. "Let us see what their intentions are. Run on in the direction they are backing us, 33F-65, and see if there is any reason why they should herd us that way."

The crowd of menacing fire-dwellers were being constantly joined by more companions. Steadily they forced the machine-men to retreat, all the time keeping a discreetly massed formation. None of them rushed forward alone. Reaching the knoll, the machine-men commented deploying along a ridge at right angles to the direction of their retreat. 33F-65 had disappeared in the smoke. Thick veils rose and hid the oncoming fire-dwellers from time to time, but always it lifted to reveal them once more. A wall of the monsters phalanxed the diverting column of machine-men, descending upon 6W-438, who represented the extreme end. The machine-man drew back with 9V-474 and 119M-5, and all

three at once engaged the pushing, pressing fire-dwellers. There followed a scrimmage in which the fire-dwellers were thrown forcibly off the ridge, but more of the great brutes came, and the machine-men were once more forced in their original direction of retreat.

Out of the smoke came crashing a running, metal form, vibrating a mental warning. It was 33F-65.

"The ground drops away behind us to a broad pit of flaming lava!"

The professor and many of the Zoromes had expected something like this. They were upon the brink of eternity, for 33F-65 had returned quickly.

"We must retreat no further," 6W-438 warned. "We must charge them and face out the issue."

"It is the only thing left to do," said the professor. "Let us form a compact wedge and drive at them."

With orderly haste, the machine men massed themselves and gathering speed rammed the very midst of the living wall. Those of the fire-dwellers having the misfortune to be in the way were crushed between the hurtling, metal bodies and their companions behind. In the rear of the flying wedge, 41C-98, feeling the force of their momentum checked and spent, hurled himself above his companions and upon the fire-dwellers. Viciously, he flailed with metal tentacles, thoughtfully regretful that these things possessed no necks to choke and strangle. Strong arms reached up and seized him. These in turn he entwined with his tentacles, and a locked struggle ensued. Those from behind the main, forward wall of the creatures pressed forward, felling the struggling antagonists and marching over them irresistibly, driving back the remainder of the



machine-men in the direction of the flaming pit. Had darkness reigned, this pit might have betrayed its existence by an aura of greater brilliance, but now a murky dawn had succeeded the darkness.

6W-438 felt the impact of many feet. The fire-dweller he held was being trampled to death. But what else was happening, he wondered? Where were his companions? Mentally, he grasped the fact that they were being driven backward toward the fiery cauldron. The fire-dwellers had planned well, yet their insignificant brains seemed devoid of such guile. More likely it was a mechanical instinct, something they had done many times before. The machine-men had found it almost impossible to glean information from the minds of these inhabitants of the fire country.

**W**HAT might have happened to the machine-men is problematical, yet it seems that their end must have been inevitable. The machine-men, now so close to the edge of the fiery furnace that they were aware of the terrific heat which surged up from below, were about to make another onslaught into the driving wall of fire-dwellers, ready to hurl themselves atop the living ranks, as had 41C-98, in an effort to gain less hopeless positions, when something happened. From above, a blast of power thundered into the close-packed multitude of the fire-dwellers. Unnoticed by the desperate combatants below, a small dot had fallen rapidly from above to merge into a growing blot above the milling throng. The space ship had come and unloosed a blast of destruction as it swooped past, 20R-654 unable to check the terrific momentum. The machine-man might have checked the speed almost instantly,

but the ship was not in free space and to have done so in the grip of gravity would have proved destructive to the occupants of the ship if not to the ship itself.

Let it be said to the courage, obstinacy or sheer lack of realization on the part of the fire-dwellers, that this preliminary, raking fire did not deter them in their fixed design. Many died and more were injured, yet on they surged. The machine-men were near to the brink of flaming oblivion. On came the fire-dwellers. The ship had plunged to the horizon in a terrific, sobbing burst of speed, playing a wailing, fantastic note in the air, through which it raced. 20R-654 had the ship veering for a return to the smoking battlefield. Like a mighty, winged phoenix, the space ship circled widely and returned.

Professor Jameson and his metal companions could feel the terrific heat from beyond the crest to their rear. Smoke partly obscured what lay below, yet the wild, mental flash of 33F-65 had graphically portrayed for them a scene of hellish aspect more than a hundred feet at the bottom of a wide gulf. With 6W-438, 119M-5 and 8L-404, the professor found himself less than ten yards from the brink of this smoking hell. The ground, though hot, was cooler than the air, which would have proved instantly fatal to any organic creatures other than the fire-dwellers, and even they, the professor noticed, were a bit reluctant to pursue their quarry to the edge of the inferno, drawing back instinctively from the withering heat, yet forcing themselves onward through sheer vindictiveness and simple concentration of fixed purpose.

The remaining machine-men were mixed among the malignant creatures

of the forward wall, fighting with the realization that the space ship had come to their aid. Not all of the fire-dwellers were willing to brave the terrific heat which smote them so intensely at the edge of the inferno, so that it was no longer a compact wall which advanced upon the four Zoromes, whose companions were now the centers of mixed knots of fighting, amid the more compact assemblage of brutes. At a mental instruction from the professor, the four Zoromes stood as if to brace themselves against the expected charge. The fire-dwellers were almost upon the machine men when the latter dodged, and more than a half dozen of the creatures plunged past unblocked, spending their gathered charge in a run and tumble which carried two of them to a flaming death, over the hot, rugged escarpment, into the blazing hell so far beneath. Lurid spray leaped up from the spots where their wildly twisting bodies had ended their long leap. A pall of smoke, swept by chance currents of air, veiled the bubbling, swirling grave of their instant cremations.

As rapidly as they had dodged the charge of the burly fire-dwellers, just so quickly did the machine-men follow up their advantage, leaping in upon the tough-skinned creatures, where they sprawled, partly arisen and rolling, pushing or hurling them, as the circumstances might warrant, into the pit of fire where the glowing chaos reduced them to smoke and molten ash.

But the fire-dwellers, who made up the second and larger group to try and force the machine-men off the precipice and into the raging conflagration, had seen what ruse the four Zoromes had employed, and they

had profited sufficiently to exercise caution. Facing the terrible heat, they came upon the four grouped machine-men, just as the space ship returned and wailed past above, spreading another devastating path of death among the evil-tempered denizens of the volcanic country. Still unheedful of the havoc behind them, the fire-dwellers, nearly a dozen strong, threw their bulk upon the four Zoromes and pushed them to the edge of the vast cauldron. Desperately, the machine-men gripped their foes. In a death grip, the professor wrestled with two of the fire-dwellers who were jointly attempting to perpetrate their hideous design. Step by step, they were forcing him backward. With sinking hope, he saw 8L-404 shaken loose from his hold and pushed over the brink of the chasm, whose far side, none of them had yet been able to perceive through the wandering vagaries of the smoke. 119M-5 rolled on the ground securely at grips with one of the fire-dwellers, while two more tried to pull the machine-man away. 6W-438 had taken a hold on the lumbering brute who had been first to close with him, turning deftly and pushing him over into the fate the other had meant for him.

ALL this the professor saw as the two fire-dwellers half pushed, half lifted him to the edge of the flaming holocaust. He swung out over the smoke-veiled sea of fire, yet his hold was so secure as not to be shaken loose. The space ship was circling above. 20R-654 had slackened the tremendous speed, and the artillery-man now picked off groups of the fire-dwellers where there would be least danger to the scattered machine-men.

With a desperate twist of his

mechanical strength, Professor Jameson hurled one of his opponents to the ground, falling upon him, dragging the other with him. All three clung together tightly. One of the fire-dwellers, he upon the side away from the inferno below, saw the opportunity of rolling the machine-man over the edge, disregarding the fact that his companion was well entangled in the metal tentacles from which in the fall he himself had partly won free. It may have been forgetfulness, or sacrifice occasioned by the alarming circumstances and the excitement, or it may have been because of the intense heat. No one ever knew. The crazed fire-dweller shoved both machine-man and companion over the brink and into the smoke-filled hell beneath, but, as they rolled over, a desperate, grappling arm of the doomed fire-dweller chanced upon the leg of his companion who was dragged after them, clawing and seizing frantically for pockets and projections where there was but slightly roughened rock. All three disappeared from sight.

Meanwhile, the space ship was taking wholesale toll of the fire-dwellers, forcing upon their sluggish sensibilities the realization that here lay only extermination and defeat. In the circling hull overhead, they recognized disaster, and they strove to escape it. Fleeing in scattered directions, they sought the densest clouds of smoke, and those, who remained in the open, found burnt-out crevices in which to hide or else stopped suddenly quiet, their gray bodies merging harmoniously with the barren desolate landscape and the scattered wisps of smoke.

The machine-men collected together beneath the protection of the space ship overhead and quickly discovered

the absence of Professor Jameson and 8L-404. In a body, they walked to the edge of the fiery pit, where 6W-438 and 119M-5 had narrowly escaped being thrown to their doom over the precipice with 21MM392 and 8L-404.

"Here was where they disappeared," said 119M-5, once Zora of the Zoromes. "21MM392 took two of the fire-dwellers with him."

WHILE they gazed over the brink, the smoke lifted, and scarcely thirty feet below they saw an inert fire-dweller stretched out upon a narrow, jutting ledge. Another of the dead brutes hung motionless, half over the edge. And then they saw a coned metal head, and a cry of glad recognition smote upon their minds.

"I am safe. Have the fire-dwellers gone?"

It was 21MM392. He had apparently struck the ledge. Again the smoke obscured him, but not before the machine-men from above had noticed the crushed condition of the fire-dweller who lay in from the edge of the ledge. Before the machine-men could make comment, the professor issued another startling and unexpected statement.

"8L-404 is down here with me but is unconscious. He must have struck his head a bit. It is not damaged outwardly, however. One of the fire-dwellers with whom I fell broke my fall for me."

When the smoke lifted again, the professor stood alone upon the ledge. Evidently, he had thrown his late opponents to the molten jaws of the glowing, fire pot, much as had the Sidonians cast their sacrifices to Moloch, yet here the offerings were not alive. 8L-404 was propped out of

sight against the receding wall of the precipice.

From above in the space ship, 744U-21 gained contact with those below, learning of what had happened. A length of cable was dropped so that the machine-men were able to hoist the professor and the still unconscious 8L-404 out of the scorching hole into which they had nearly been thrown to their deaths.

"There is no near place in this fire country where we dare to land," said 744U-21, "but luckily you are not far from clear ground. You have nearly crossed the fire country. Follow the flight of the space ship, and we will guide you out."

Though the trip had been a long and arduous one, the following of the stars at night had brought them in a straight line to a position not far from the edge of the volcanic region. They were soon to be rid of the eternal fires. Picking up their crippled companions who had also taken part in the recent conflict through necessity of self-defense, and carrying the unconscious 8L-404, the machine-men trudged on over this heated terrain of smoking crevices and molten rivulets.

"I recollect seeing the land to the other side of the fire country from far above," said the professor. "What is it like? Is it inhabited?"

"It is inhabited," replied 744U-21 from the space ship. "That we already know. But we know nothing concerning the inhabitants. The land is much like that we explored before you entered the volcanic bad-lands. It is well wooded and given up almost entirely to dense vegetation. We could see no cities, so the inhabitants must be of a savage or a barbaric nature."

"I hope they are peaceful, or else not as hard to handle as are the fire-

dwellers," 6W-438 remarked. "I am tired of physical combat for the time being."

AS the machine-men progressed they noticed that the molten lakes and crevices of fire became less numerous, and the smoke clouds became less. Finally, they were able to glimpse occasional views of the country bordering the wastelands of fire, and they were gladdened to know that soon they would be free of the treacherous fire country where they had lost one of their number and had nearly been settled for, one and all. It was still a long way to walk over arid desolation after they had left the last bit of smoking ground, but eventually an era of bush-growth and a forest in the background greeted them. Here, the space ship had landed. 8L-404 recovered shortly before they reached the space ship. The last he had recollected was plunging over the edge of the precipice bordering the lake of fire. The smoky haze had enveloped him, and he had felt his tentacles clash against something just a split second before oblivion had enveloped him.

At the space ship, the crippled machine-men were repaired, exchanging warped and misshapen legs blued and partly melted by the heat for new ones. A few tentacles needed replacement, but it was mostly the legs that were damaged that had walked too often through the lava beds and molten pools.

With ten companions, the professor started for the forest. The party of eleven was progressing through the semi-arid bush-land, less than a quarter of a mile from the forest when several indistinct flickers of motion apprised them that they had been seen and were being carefully

watched. Bushes far ahead of them quivered perceptibly from time to time, and the vigilant eyesight of the Zoromes saw slinking forms darting in and out of the forest from time to time. More of them seemed to leave the forest than entered it, the professor observed.

"What are they?"

"We could see but little of them from above in the space ship," said 744U-21. "We caught no more glimpses of them then than we do now."

"They are hiding, but not running from us."

"It looks as if they were trying to ambush us," 29G-75 observed. "It is well that we brought along the ray ejectors from the space ship."

"They are sneaking from bush to bush; they are coming nearer."

In truth, this was so. Yet the creatures skulked so close to the ground and moved so swiftly that the machine-men could gain only an obscure idea of their shape and proportions. They were more than half the distance from the space ship to the forest when faint sounds broke in upon their hearing. Flutelike notes they were, possessing a variance in scale. They came apparently from the forest. Following a moment's extended silence, an aria of the musical notes burst forth again as in wild melody.

As the machine-men continued their walk in the direction of the forest, this simple melody was repeated again and again as if joined by many instruments of the same kind. It seemed a musical chant of sad warning. That was what the professor gathered from it, and he found that his metal brethren were similarly affected by the haunting music. Still they continued. The weird harmony now assumed a new note, one of

mingled defiance and warning. Plainly, the machine-men were being warned to proceed no further. As they did not cease their stride, the music grew threatening and wildly exhilarating, and the harmony was broken by variant fancies of tone, merging into a martial phantasm of melody. In it there existed a questioning lilt, and, as if in reply, there broke forth from the scattered bushes, just ahead and to each side of the machine men, an astonishing volume of operatic reply.

"They must carry musical instruments of a sort," 744U-21 commented in surprise. "That is indeed strange."

"And they are a menace," added the professor, "if we are to interpret their renditions correctly."

## CHAPTER III

### THE FOREST VILLAGES

THE air rang with a combined symphony which reminded the professor of latter bars in the Poet and Peasant Overture. At a certain point in the warlike song, out from the concealing bushes sprang a representative horde of the things 744U-21 had said inhabited the vast forests stretching away from the fire country into the limitless back country beyond.

Possessing long, angular bodies and long, pointed faces, they were supplied with many short legs running up the sides of their bodies. There were fully a dozen of these, the professor's first glance estimated. They walked erect on the lower pair of these legs which were three times as long as the other legs. The machine-men now understood why these creatures could move so rapidly along the ground and keep out of their sight.



The professor visioned them as something like thousand-legged caterpillars standing erect on two legs longer than the others, their bodies surmounted by heads appearing much like a fox's except for the absence of the long, pointed ears. On second sight, the upper legs were not entirely legs, even as the feet of a monkey are not entirely feet. They could be used for holding something as was evident, for many of these monsters carried long, curved hooks of what appeared to be crudely hammered metal.

Menacingly, they ran to meet the machine-men, making the air ring with their fierce music. And now the machine-men of Zor were in for another surprise. The melodious sounds did not issue from instruments but from the throats of the monsters themselves.

Approaching nearer, the creatures paused suddenly, and their song changed, became garbled in disorderly chaos as if many of them had suddenly disagreed as to the proper selection. Reading their minds, which the machine-men gratefully found to be not only of an open, orderly nature but also susceptibly receptive to their mental attunement, they found that the strange things were stricken with awe and surprise. They had evidently just discovered that the machine-men of Zor were not what they had expected them to be. In their minds, the machine-men saw that they had been mistaken for a roving band of the fire-dwellers. The monsters from the forest hesitated uncertainly, the machine-men finding an opportunity for conciliatory measures.

"We, too, are enemies of the fire-dwellers," the professor impressed upon them. "We were attacked by

them and fought them in the midst of the fire country."

MUSICAL bits interposed upon the silence fallen among the many-legged creatures, and it was apparent that they were conversing, that they always talked to music. Penetrating their thought-train, the machine-men found them to possess a crude, barbarous intelligence, far above that of the fire-dwellers. Surprise and greater awe were set to melody in the exchanges between the music-monsters, and in it there was mingled respect, respect tinged, however, with suspicion and distrust. This, the machine-men promptly allayed.

"We wish to be friendly with you," 29G-75 offered.

"Where are you from, and what are you?"

This was the general, unuttered consensus of the attitude directed at the machine-men, which, though unvoiced, lay naturally uppermost in the minds of the creatures.

"We are things made of metal, like those weapons you carry for attack on the fire-dwellers," said 744U-21, having already divined the purpose of the hooks. "We come from a world far beyond this one."

Although this information was mostly lost upon the restricted understanding of the music-monsters, the simple, straightforward reply to their questions caused a better feeling and relaxation of suspicion. They approached, slowly and wondering, all eyes intent in observing strange things the machine-men were to them.

The machine-men engaged them in thought exchange, impressing upon them that, although their musical utterances were peculiarly expressive

of their thoughts and attitude, the machine-men found their thoughts much more legible.

"What is that huge bird that flew down out of the sky?" one of the music monsters interrogated.

"It is our space ship in which we travel. Like our bodies, it is mechanical."

Part of this was understood. The creatures seemed satisfied.

"You fought our enemies the fire-dwellers?" came the next query. "Did they try to push you into the fires or break your bones with their powerful, crushing arms?"

"They tried to push us into their lakes of fire," Professor Jameson replied. "We are too strong for them to crush, and even should they accomplish this and reduce our bodies to junk, our heads would live on as long as they remained undamaged."

"They are our natural enemies," were the thoughts of the music-monsters reduced to words. "We fight each other continually. Sometimes, they conduct raiding parties up out of their natural element, coming into the forest after us. Then again, we

sometimes penetrate the fire country for a distance and war upon them. Neither of us can enter the other's domain for long. We cannot stand the heat; they cannot exist very long without it."

"Nor without the sulphurous fumes they breathe," added 41C-98 in an aside to his companions.

"Of the two factions, they have the advantage of greater security, for they can go into parts of the fire country where we cannot go even though we are garbed in the heavy pelts of slain fire-dwellers. They can come anywheres in our country until the prolonged lack of heat drives them back again. We, however, overwhelm this advantage of theirs in the respect, that we are a superior race and know how to do things they cannot think to do."

The music-monsters proudly exhibited their weapons.

"We also live in communities, which the fire-dwellers do not. They wander aimlessly without homes. We move from place to place occasionally it is true, but we always build. We do not live in the open as they do!"

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Printed in the interest of public well-being!

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When Nature forgets—remember

# EX-LAX

THE ORIGINAL CHOCOLATED LAXATIVE



WHILE the music-monsters were eager to demonstrate their superiority over the fire-dwellers, it struck 6W-438 as strange that since it had been the belief among them that the fire-dwellers lived on the fumes of the fire country and did not derive gastronomic sustenance from organic sources, why should they battle the music-monsters other than in self defense? 6W-438 asked as much, although in his mind the suspicion of the truth lurked in his recollection of the attack on the machine-men by the fire-dwellers, but he was not yet positive.

"Why do the fire-dwellers come out of their country to fight you?"

"To kill us."

"But why should they? What is there for them to gain?"

"It has always been so."

One of the more astute among the creatures afforded a more satisfactory answer.

"They are of a perverse, cross-grained nature. They would not leave us in peace, even were we to do so by them. It is their nature."

"And why do you enter their country to fight them?" 744U-21 asked. "What, besides vengeance, prompts you to endure the discomforts and hazards of the fire country?"

"We value their pelts. We have many uses for them, principally as a method of barter. Then, we, too, like to fight, and the fire-dwellers furnish a worthy excuse."

The machine-men, though admiring the various qualities of the music-monsters, felt that less worthy excuses might suffice them were it not because of defense that they fought the fire-dwellers. It struck the professor that the main reason why the fire-dwellers could not stay out of their fire country for too long a time

was not because of the eventual penetration of cold through their thick pelts, though this may have been a secondary reason, but the fact that the fire-dwellers grew hungry for the dense clouds of sulphurous smoke in their natural environment.

Sending back a messenger to acquaint those at the space ship with the fact that the inhabitants of this new territory were friendly to them, the machine-men proceeded onward into the forest with the music-monsters. They found the forest aisles neatly kept, and here they learned that the music-monsters were strict vegetarians, living on the smaller growth, eating certain kinds of soft wood and various kinds of bark. Their domiciles were found to be small constructions of baked mud held together with twigs, an occasional branch being used, especially in the arched ceilings. They were much more orderly and better made than those of the Ooaur's.

The machine-men were struck with the novelty of musical discourse among the barbaric creatures. Always were their musical utterances, even the most commonplace, harmonious. It surprised the professor how many types of earthly instruments the sounds resembled. The commonest resemblance was to the notes of a flute; then there were many whose utterances sounded as if drawn from quick manipulations of a violin bow. Deeper voiced specimens among the music-monsters imitated unwittingly the tones of an oboe or bass viol. Rarer specimens of sound duplicated the harp, guitar, trombone and piccolo. Clarinet voices were common, though nowhere could the professor find any voice resembling a piano, organ or cornet. Strange to say, the music-monsters placed no value on their

various abilities nor sought to cultivate or exercise them in any manner. Familiarity had bred contempt.

Instead, a ludicrous paradox existed in the fact that the only sounds the music-monsters made, which might be approximated to musical enjoyment, were dull, rhythmic sounds on hollow trees accompanied by a maddening, monotonous drone, all in one key.

STRANGE memories often leaped into the professor's mind across the gap of forty million years, as various couplets of musical conversation accidentally struck a passage of music familiar to him in the long, long ago. Once there had come a fleeting bar of "Lohengrin," then again an incongruous portion of "Turkey in the Straw." Often he was reminded of some old air the title of which he had long forgotten. In discoursing on how the pelts of the fire-dwellers were cured after a raid and cut up into medium of exchange, a music-monster had hit accidentally upon a bar of "God Save the King." 119M-5, not so far removed from the prime of an organic existence, recognized passages of music similar to those which had been heard or sung on the planet Zor. The passages, of course, were incomprehensible and unconnected with the rest, as far as the professor was concerned, even as to 119M-5 were the earthly similarities detected by the professor.

From music arose memories, and to the professor's recollection leaped events of triviality, which had remained dead with him for forty million years and were now recalled to life even as he himself had been by the Zoromes chancing upon his rocket satellite circling the untenanted earth. What many centuries of enforced

meditation had failed to do while he was alone in the wrecked space ship circling the planet of the double sun, these chance bars of music by the music-monsters had accomplished. His distant past seemed that much more complete.

The machine-men had decided to stay among their new acquaintances for a short time. The space ship had been moved up to the edge of the forest, where several of the machine-men were always stationed with it, having a good number of the curious music-monsters for company. The latter stood in awe of this great flying thing into which they were allowed to enter. Several of them possessed the life-long boast of having ridden in it, as it was moved up from the edge of the fire country to the forest.

One intelligent music-monster the professor had dubbed Armina in his own mind and recognized him as such through the fact that when his companions spoke, or rather sang, his name, the notes duplicated perfectly the opening bars of a song the professor had known by that title.

The music-monsters possessed one earthly characteristic which struck the professor as singular. They were inveterate gamblers, employing a number of ways to play games. Not only did they gamble, the valuable squares of thick hide they used as common barter, but also gambled freely with their weapons, mates, offspring and even their own services, gambling themselves into virtual slavery for certain periods of time. Often this gambling was diverted from chance to skill in the uncanny casting of their hooks into trees at a considerable distance, but usually they employed a numeric hazard, or guessing. Their chief means of chancing, however, consisted of dice or else the

old method of heads or tails, using one or several pieces of metal, distinguishing characteristics, symbols, or crude attempts at illustrative art on either side. Strangely enough, they never employed these pieces of metal as a medium of exchange. The dice were very large and crudely wrought of metal, the music-monsters usually employing but one at a time.

On the dice were various symbols including a poorly sketched fire-dweller, the sun, the jagged-edged moon of the planet fragment, a tree, a prominent constellation of stars peculiar to this perspective of the universe, and the sketch of a music-monster. Characteristic of the ego in the music-monsters, the representative of their own race on the metal dice signified the fullest value, while the other five illustrations and symbols decreased in value down to the fire-dweller whose likeness was roundly cursed in musical blasphemy by whoever's misfortune it was to turn up that particular side. Obviously, these crudely constructed dice were imperfectly balanced and played heavy favorites. Closely associated with this uncertainty and fervor of gambling were the accompanying brawls, for many of the music-monsters were not loath to cheat. Such differences, however, rarely led to fatality, for the creatures were constrained by accepted law not to use their hooks on each other, employing instead a rough and tumble mode of fighting, which featured a grappling and pummeling of each other with their many feet.

THE villages of the music-monsters were open parks amid the dense forests; the various communities were located within a few miles of each other. Comparatively, the extensive forests were quite popu-

lated, and clear, wide avenues of parkland stretched like highways, linking up the villages as ways of travel back and forth. The machine-men spent most of their time close to the frontier bordering the wastelands. Those in the interior rarely saw the fire-dwellers unless they visited a border village close to the fire country. Therefore, the border villages contained the more adventuresome types to be found among the music-monsters.

One night, Professor Jameson and three companions and several of the music-monsters, were gathered close by the space ship in the dim light of the rugged moon. From the fire country came a lurid yet less illuminative glare which suffused itself through rising, coursing smoke clouds which from far off were lent a sinister grandeur. More celestial, more dignified, was the pale brilliance from the jagged spires of the risen moon, the points ghostly white, the shadows sombre, the little satellite possessing a crude, star-shaped design. Like a colossal conflagration, a horizon dipped in hell and held dripping skyward fantastically, such was the extended view of the fire country at night. In the space ship were three more of the machine-men. All seven consisted of the inevitable watch left with the ship. The rest of the Zoromes were scattered about the neighborhood of the forest, most of them in the nearest village.

The music-monsters were gambling. Looking on and furnishing an aura of illumination with their body lights, were the professor, 4F-686, 41C-98 and 12W-62. Armina and four companions were the gamesters, and the large dice had not done so well by Armina. He had lost his squares of hide, and now he was risking some-



thing he did not yet possess, but which had been promised him. The music-monster had been desirous of a ride in the space ship clear across the fire-country. This had been the height of his ambitions, and the machine-men had promised that he would be one of the villagers to be taken aloft the next time the space ship rose. Secretly, the machine-men had something better in store for the music-monsters than a mere ride over the fire country and back. They would keep on going all the way around the planet fragment, coming back by circumnavigation.

NOW, Armina was gambling his chances of the coveted ride with a companion who had willingly massed a recently acquired pile of hide barter, some of it having previously been in the possession of Armina, as a stake. The dice rolled. Up came the tree. This was arbitrary in the fact that it called for a further side bet, holding the original stake in suspension. Armina had nothing left to bet. The cast was disregarded, and now it was Armina's turn to roll the cube. He hesitated, juggling the dice preliminary to throwing, and then with fatalistic resignation twirled and let roll. The dice stopped, and the poorly executed likeness of the fire-dweller stared mockingly at Armina. He had lost, and the stake set up by the other gamester was being returned to a huge pouch carried by the music-monster, when a commotion in the direction of the space ship attracted the attention of them all, players and spectators.

Simultaneously, there flashed into the minds of the machine-men an electrifying communication from the space ship. Already they were cognizant of the circumstances of which

the music-monsters were soon to know.

"Fire-dwellers! In the space ship!"

"A raid of the fire-dwellers!" the professor attuned his thoughts to the perceptibilities of the five music-monsters. "Come quick!"

Machine-men and their allies raced to the dark, looming hull between them and the volcanic region. Limned against the lurid background of the fire country were the dark bodies of the fire-dwellers, surging in large numbers toward the space ship. The machine-men headed for the entrance and found a closely-packed mass of the fire-dwellers before them. Inside, the professor knew were 29G-75, 948D-21 and 454ZQ2. Shining their body lights upon the milling throng and beyond to the side of the ship, the machine-men were appalled by the large number of the attacking brutes. In the dim light of the moon, and against the red glare of the fire country, they saw many bobbing forms and knew that more of the dread creatures were racing across the barren plain.

"Get to the doorway and enter the ship!" the professor told his companions and allies. "We must hold it in defense until reinforcements come from the village!"

Many of the fire-dwellers were stamping on in the direction of the forest, but most of them were gathering around the ship. Already, the machine-men and music-monsters were hemmed in by the increasing numbers of the raiding masses from out of the infernal region. Silent and grim they were, intent only on death and destruction. The music-monsters fought madly, ripping and tearing with their hooks, fighting ever nearer the ship in company with the machine-men. Fire-dwellers were pouring into the

space ship when the professor fought his way to the open doorway. Immediately behind him, Armina raised a gleaming hook and sank it expertly into the diminutive brain of a fire-dweller who sought to block the machine-man. All four of the Zoromes were flailing with their tentacles.

## CHAPTER IV.

### ADRIPT

THE professor urged Armina into the ship ahead of him and turned to find that only two of the music-monsters were still alive in the press of fighting. The other two had succumbed beneath overwhelming waves of their enemies. Had the fighting been more open and in less restricted quarters, doubtless the surviving three would have been killed, but in the pressing multitude but few of the brutes from the volcanic country could reach them at once, and these were hampered for lack of room. With their wicked hooks, the two music-monsters were viciously slashing to right and left.

Holding the doorway with his intense heat-ray, Professor Jameson covered the rear of the two music-monsters who made their way to the entrance and leaped inside. Far back, three machine-men were battling closer to the ship. The professor now shone his heat-ray upon those who blocked their way.

With a lunge, the nearest one, 4F-686, stumbled and caught the edge of the doorway—and then many things happened. Rough, asbestos-skinned arms closed around the professor's body from inside the space ship, just as the ship gave a jolt and leaped upward violently. 4F-686 was lifted high above the ground as his grap-

pling tentacles slid over the edges of the doorway and he fell downward upon the heads of the milling fire-dwellers whose pressing ranks closed involuntarily upon the opening left by the ship. As the space ship rose crazily, and the professor tried to throw off the encumbering bodies which held him to the floor, from out of the forest raced a mixed throng of music-monsters and machine-men in answer to the call of those aboard the ship. Only momentarily did they pause to consider the receding space ship, and then they threw themselves into the belligerent fire-dwellers whose profuse numbers now threatened the villages.

From the open doorway of the ship, Professor Jameson's apex eye caught a reeling panorama of fire-country. Rough, groping paws with long, horny claws felt for a hold, lifting him up. Wildly he struck out with his tentacles, as he realized they were trying to throw him out through the doorway to the ground a thousand feet below. The ship was now rising faster. His heat ray found a rough body and a bit of concentration penetrated the thick hide, causing muffled snorts of pain from the tiny apertures all over the creature's body. Broken away from their insidious grip, the professor quickly closed the door, knowing full well that the limited intelligence of the great, dumb brutes who had held him temporarily powerless would not be able to fathom its operation. Again the heat-ray played out, bringing whistling noises from the many victims. The fire-dwellers withdrew, the professor moving slowly along behind them. They made a quick charge at him, and, realizing that he must form some plan of action at once, the professor leaped nimbly past them and clanged shut another

door, sealing them in the compartment.

The fight which ensued was a monotonous yet grim combat. Knowing that the ship was overrun with the fire-dwellers against four machine-men and three music-monsters, the professor had closed off all further interruption by closing the door leading into the depths of the ship. Knowing that the huge, strong creatures could do him no lasting harm, and intent upon slowly beating them down, the professor charged in and grappled with one, while the remaining two, as he had anticipated, flung themselves upon him. It became a tiresome contest of trying to get his heat ray directed against a vital portion of one of the things and killing the creature, thus cutting down the opposition to two. Had they been ordinary organisms, the heat-ray would have accomplished swift work, but these Lucifers had lived close to fire all their lives. Pulled off and flung down, the professor was making little headway. Occasionally, when the opportunity offered, he picked up one of them and hurled the brute against the wall head foremost. This induced a dazed condition, but it also gave the fire-dwellers the same idea, and the professor had to cling to them desperately to frustrate their design. How he wished he had one of the hooks of the music-monsters which were so peculiarly adapted to killing fire-dwellers. Already, he had flailed their outer hide to ribbons, and it looked as if that were the only effective way, other than getting in intensive work with the heat-ray, which was difficult, opposed as he was to the three of them. During grappling deadlocks with the three beasts, he had exchanged mental communication with the other Zoromes, ac-

quainting them with his own dilemma and learning of theirs.

"The space ship is, alive with the fire-dwellers!" 29G-75 exclaimed. "There are at least twenty of them aboard!"

"The ship is still rising!"

"We have shut ourselves off in a separate compartment even as you did, 21MM392. We believe that soon the fire-dwellers must die through lack of sustenance."

"But what of the music-monsters?" the professor queried, trying earnestly to bring his heat ray to bear consistently upon the head of a fire-dweller who sat upon his metal cube while another kicked at his head. "They will die, too."

"No—they claim that they can go several days without food, while the fire-dwellers die after more than a day and a half away from their fire country."

"What made the ship rise?"

"The fire-dwellers tampered with and broke some of the controls. The ship is rising and drifting. We are a long way from the fire country by now."

"We are in space," added 948D-21. "We just left the boundaries of the outer atmosphere."

Instantly, the professor conceived an answer to the problem before him. Winning free of the brutes who were trying to bend his legs, he rushed to the side of the ship nearest the door. He could walk, and he had all of his tentacles. The professor was thankful that these inhabitants of the smoking waste lands were not quite as powerful as the Ooauras had proved themselves to be. He turned a lever just as the determined creatures made another charge for him. They seemed tireless. A faint hissing to which they paid no heed, became audible. The

fire-dwellers soon began acting strangely. They seemed to weaken and weave deliriously. The professor slipped clear of them, watching them intently and waiting. He slid along the wall, his metal body rasping faintly as one of the stupid beasts charged on wavering feet. Raising a metal foot, the professor shoved him to the floor from which he found difficulty in rising.

The faint hissing continued. The air was leaving the compartment, slowly dissipating itself into space above the planet fragment. All three of the fire-dwellers were breathing in labored gasps, their many ventricles swelling and dilating to suck in the precious, rarefied gas which was becoming still rarer. They could hardly move.

CERTAIN that no longer would the evil, stubborn creatures be capable of a concerted rush upon him, the professor opened the door and stood looking out into the abyss of stars and reflected sunlight off the planet fragment. A magnificent panorama lay far below, one-half of the broad fragment slowly turning towards the drifting ship, the sunlight creeping up the right-angled side ready to flash simultaneous daylight all over the facet it was gradually approaching. Still above, yet to one side, surrounded by the fiery stars, there shone the jagged moon. Through the open door, the air left much faster, and the intense cold of space pushed in to replace it.

The professor lost no more time. Seizing the leg of an inert, stiffening fire-dweller, he dragged the body to the doorway and sent it gyrating off into the gravitational grip of the planet fragment. Another body followed the first on its long plunge into

territory it had never known in life. The third body the professor heaved toward the doorway where it struck the threshold and glanced out into nothingness. Immediately, he slammed shut the door, for he had no temperature equalizer. The machine-men had removed these on leaving the fire-country. They were stored in other parts of the ship.

The thought struck him that were it not for the music-monsters aboard, the machine-men could eject all air and heat from the ship and put on the temperature equalizers, instantly killing the many fire-dwellers still on board. There came an afterthought, that, if the circumstances should become too alarming, the music-monsters might have to take their chances with the adoption of such a plan, keeping to a single, air-filled compartment.

"I have disposed of three fire-dwellers," the professor informed his companions in the distantly removed compartment where they held siege. "How many more are there?"

"At least fifteen," 948D-21 replied. "We can hear them moving about the ship. Their attitude seems to be changing. They are becoming confused and scared."

"Are they in the control room?"

"Yes, but we are only waiting until the greater number of them go to other sections of the ship. Armina says that he and his companions can overcome several of them with our help. We are waiting for the most propitious moment. If we can isolate half of them, we are confident of overcoming the remainder though they outnumber us."

Patiently, the machine-men and their peculiarly valuable allies, the music-monsters, waited for their chance. Intense, mental concentra-

tion of the machine-men, into the weak, muddled minds of the fire-dwellers, kept them constantly apprised of the number of the latter in the control room which was by far the largest and the central compartment of the space ship. Curiosity occasionally led the fire-dwellers to other sections of the derelict craft, yet always there remained an overwhelming number in the control room. After the first clash with the machine-men, there had been no more damage to the governing mechanism. The brutes were far too bewildered to consider vandalism and too awed to tamper with the already broken controls which they did not understand.

The music-monsters were having a good time. The fluctuating numbers of their enemies in the control room and the decision to attack with the best odds available, appealed to their gaming nature. Armina was especially exultant. Fate had oddly twisted the apparent course of events. He had lost on a gamble his chance to ride in the space ship, yet here he was; but like an evil omen the fire-dweller's caricature, turned up on the dice, had immediately cast him into alarming circumstances with many of these enemies.

The professor waited for the moment when he should hear them ready for the rush on the control room. There was nothing he could do. Only seven fire-dwellers remained in the control room. Three machine-men and three music-monsters rushed suddenly the dazed and unsuspecting denizens of the volcanic country. Through the minds of his mechanical brethren, Professor Jameson gained a picture of the fray. 454ZQ2 shoved one of the brutes out a doorway and closed the

entrance, while his companions closed the remaining entrances. The music-monsters swung lustily with wicked hooks. It was soon over.

**I**NVULNERABLE to attack, the machine-men after closing off all chances of help from the rest of the fire-dwellers, engaged them, while from prearranged plans the three music-monsters went around swiftly and cut down the antagonists of the machine-men with their sharp hooks. One of the music-monsters was seized and crushed by two of the fire-dwellers. His death was avenged six-fold as the rest of the cornered brutes were cut down. Seizing the hook of the dead music-monster, 454ZQ2 quickly realized its uselessness in his own unpracticed grasp. For one thing, it required the peculiar grip of the music-monster, and it also required knowledge and skill of where and how to hit. After a few ineffectual rips into the tough hide of a fire-dweller, the machine-man threw it down in disgust.

Six bulky corpses lay on the floor of the control room. Eagerly the professor waited for the examination of the controls.

"They are in bad shape, 21MM392," was the ultimatum of 29G-75. "There will be the necessity of many repairs to them."

"Can the ship be guided?"

A moment's pause followed as the machine-men in the control room made a few trials. The answer came ominous and disappointing.

"We have no control upon the ship at all. It has ceased to rise. We are being held by the gravity of the planet fragment and shall probably rise no higher. We are drifting in an ap-



proximately lengthwise direction of the planet fragment."

"What are we to do regarding the rest of the fire-dwellers?" queried 948D-21.

"Now that we have the control room in our possession, we can afford to wait and let them die," the professor stated.

"What of Armina and his companion? There is no food for them here, and besides, after a time, if we are to continue to drift in this manner, the air will have become too noxious for them to breathe."

"Food will be the problem," said the professor. "They will be dead of starvation long before the air in these many chambers becomes unbreathable."

"They may have to digress from their vegetable diet when they become sufficiently hungry," suggested 454ZQ2, his thoughts touching lightly on the six dead fire-dwellers.

The professor also thought of the remaining survivors of the attacking band, that had entered the space ship.

"We still have meat on the hoof, too, you know," he offered jokingly, yet as always his humor escaped the understanding and appreciation of his companions.

It elicited but a sober reflection from 454ZQ2.

"When I was a triped on the planet of the double sun, I ate the meat of lesser creatures and enjoyed it."

"On my world," reminisced the professor, "there were savage tribes who ate the meat of their betters and also enjoyed it."

"The space ship may come down," said 948D-21.

THE machine-men debated their situation, occasionally attuning their thoughts to those of the music-

monsters on some subject of common bond and mutual understanding. Meanwhile, they waited for the fire-dwellers to die. They heard them at times roaming about the space ship. Never did they try to force the entrances of the control room. The dim-witted creatures of the outdoors did not understand doors any more than they did the walls. To them, an entrance was a hole. Had they known the use of doors, however, their combined bulk could not have forced them open.

The possibilities of their having to subsist, on sustenance furnished them by the bodies of the fire-dwellers, disgusted the music-monsters, yet when their grave future was thoroughly explained to them they became partly reconciled to the prospects of such a diet. Both, however, claimed they must become very ravenous before they would yield to this alternative to starvation. They hated the fire-dwellers as a menu as they hated them as neighbors. There was only one use, perhaps two, which the music-monsters had for them: their hides and as a quarry in hunting and war.

Finally, the steps of the fire-dwellers were silenced. Not until then did the machine-men and their two allies go in search of them. Professor Jameson, in hastening to join his companions in the control room, stumbled over one of the fire-dwellers in the passage outside the compartment where he had been waiting. A cursory examination proved the creature to be entirely inanimate. The luckless fire-dwellers were found all over the ship in strange positions, dead. One stood on its feet sprawled against the wall. Several of them sat on the floor of the supply room facing each other with spare, mechanical legs of the

machine-men between them as if even in death they pondered this puzzling, unanswerable enigma. Only one of fourteen fire-dwellers did the machine-men find alive, and he was breathing his last when they discovered him.

The machine-men, on the advice of the professor, took the dead fire-dwellers to the nearly airless chamber where he had recently bested three of their enemies, and the remainder of the atmosphere still lingering in the chamber was released. Back in the control room once more, the two music-monsters optimistically commenced gambling over the pelts of the twenty fire-dwellers, feeling themselves potentially wealthy. Little did they seem perturbed over the uncertain future they faced, no more anxious than the machine-men who were constantly facing such circumstances. Yet the machine-men had more concrete basis for their fearlessness. They were not flesh and blood.

The space-ship drifted on towards one end of the planet fragment, continuing at the same level. The professor estimated that they were fully eighty miles above the planet's surface, far above the last remnant of outer air. Already, they had floated close enough to the end of the fragment to look down into the cross-section of atmosphere of the end territory.

"What do you expect will happen when we pass the world's edge?" 948D-21 queried. "Shall we keep on going straight or turn with the contour of the planet?"

"We shall turn—of that I am sure," said the professor, "but at what level we shall continue to cruise above the surface is problematical. The gravity in the two end zones of this great

slab is much greater than the attraction of any of the other four facets. It also presents the least amount of surface, although that consists of territory enclosed by four thousand miles on one side and fourteen thousand miles on the other. We have never landed on this end, although we paid a brief visit to the other end which slants at a rather sharp angle. From end to end there is a diameter of twenty-three thousand miles. We shall certainly be drawn closer to the surface than we are now."

Apprised of what was to happen, the music-monsters were all eyes and interest. Little had they known of the world on which they lived, and what they now saw they scarcely understood. In musical conversation, they remarked on the weirdness of it all, this strangest of all adventures.

The space ship kept on past the planet fragment, as if it were destined to float off into space away from the mighty slab, yet expectantly the machine-men waited for the right angle shift which they knew would come. They were beyond the cross view of the atmosphere in a position where they were able to view slantingly the end country of the planet fragment before the professor noticed any change in their course. There was no right angle turn such as a vehicle or traveller might have executed on the surface. The initial perception consisted of the illusion that the space ship had dropped more on a level with the lengthwise facet it was leaving, yet was still continuing away from the strangely formed world. The space ship slowly described a curve which brought it into the darkened end territory of the irregular mass and settled into the darkness closer to the ground.

## CHAPTER V

## THE CRASH

SUNLIGHT faded out of view beyond the world's rim they were leaving behind. In impenetrable darkness, except for the stars above them, they coursed above this unexplored territory. Below them, while all lay black.

"At our present rate of speed, how long will it take us to pass this end of the world?" asked 454ZQ2.

"For some reason or other, our speed of drift has slowed down, and we are settling closer to the surface," 29G-75 informed them.

"I expected the latter to occur," said the professor, "but why should our speed abate?"

"Something about the nature of the unmanageable controls. They have become affected by the greater gravity in this end zone.

"We may fall," suggested 948D-21 cryptically.

"We have the gauges to watch. We can only wait and see what happens."

"Are they reliable?"

"They seem to have remained undamaged."

All through the darkness, the machine-men kept vigil over the gauges, watching the alarming tendency of the uncontrolled ship to slip over planet-ward. Uncertain of the gauges in the darkness where they could see nothing, the machine-men occasionally tested space outside to discern possible traces of atmosphere, to see if they were closer to the ground than the gauges showed them to be. Already, the gauges showed their position to be slightly more than an elevation of twenty miles, but here in the end territory the atmosphere lay more compact and dense, the outer limits of the air having a lower alti-

tude due to the intense gravitational attraction.

The machine-men were relieved when a weak but growing dawn supplanted the night and they were able to see where they were. Below them lay a vast panorama of land and water, desert and vegetation, hills, mountains, valleys and plains. The mountains cut across one corner of the facet and were not so high as those seen by the machine men on other portions of the planet fragment. The music-monsters were complaining of gnawing hunger, yet were still reluctant about eating their enemies, the fire-dwellers.

By the time the sun had arisen like a ball of incandescence out of the sea of air beyond the rim, the space ship had dropped to the alarming altitude of only five miles. No longer were the machine men in doubt. The immense gravity of the planet fragment was drawing them down. What was more, their descent was sufficiently fast to threaten their safety when the space ship landed.

"Get out the mechanical wings and the degravitators," the professor told them. "If we have to abandon ship on the wing, the degravitators will be necessary. Experience down on the other end taught us that."

"What about the music-monsters?"

"We may not have to abandon ship. It is only a possibility. If we do, we can wait until the last two miles and carry them with us."

"Is there nothing we can do to save the ship?"

"Nothing. We must trust to chance."

"It will be long before we can ever repair it and leave this world."

"It may be longer before the rest of our number discover our where-

abouts," observed 29G-75 pessimistically. "For all they know, we might have drifted off in space. They will wait for us to return, not knowing that we cannot do so."

The mechanical wings and degravitators were donned, and the two music-monsters were equipped with the degravitators and given their instructions. The machine-men had considered the little space cars carried in the ship, but these were largely dependent on remote control from the ship, and here again the unmanageable condition of the ship's controls blocked them from an assured avenue of safety. The degravitators were like those the organic Zoromes used on the large planet Domp of their own system and called gravity nullifiers.

Closer they fell toward the planet fragment, the machine-men anxiously scanning the gauges, the music-monsters excited and tense, fully cognizant of the dread circumstances they were facing. Within four miles of the surface above a vegetated plain, the professor noticed a lessening of their downward drop, which he attributed to the denser atmosphere near the ground. Still, the pace was one sufficiently dangerous to their welfare, especially to that of the music-monsters.

With Armina in his tentacles, the professor stood ready at the door of the space ship prepared to leap. Behind him stood 948D-21 with the other music-monster. 29G-75 and 454ZQ2 had elected to stay until the space ship was nearly to the ground. At a mile and a half altitude, secure that the music-monsters would suffer no harm at this low level, the professor and 948D-21 leaped out of the space ship. Armina gave vent to a melody of terror as the professor's mechanical wings failed of instant

action and they plunged like a stone, whirling giddily. But the professor did not bring himself up sharp, for fear of the excessive gravity wrenching Armina from his grasp, and so he decreased their falling speed slowly while clinging tightly to his larger companion.

THIS one terrific plunge had sped the professor down ahead of the space ship and 948D-21, and he landed to watch the falling bulk of the ship. With a musical sigh of relief, Armina slumped to the ground, having been thoroughly scared out of his wits and never before in his life having ever felt so thankful. 948D-21 and his charge were still small objects in the sky beside the huge space ship. The professor believed now that the ship's descent had slowed even more, yet he dared not feel positive, for his standing position below might have given him a deceptive perspective. 948D-21 was flying not far from the ship in concentrated spirals, waiting to land after the ship had struck.

Immovable, Professor Jameson watched fearfully as the ship neared the ground. The remaining machine-men had not leaped. The professor watched for them. They did not appear. With a dull crash which the professor knew had sprung many plates and joints, the space ship struck. 454ZQ2 and 29G-75 had elected to remain on board. Leaving Armina to make his way as best he could, the professor hurried to the space ship which had plunged awkwardly into the ground and lay on one side. Dodging bushes and plants and frightening queer, little animals from his path, the professor arrived at the side of the ship just as 948D-21 came to rest on the ground with the music-

monster. Climbing out upon the hull came 454ZQ2 and 29G-75.

"It might have been worse," philosophized 29G-75. "The injuries to the ship are not wholly irreparable, but we can do nothing until the others arrive."

"Why did you stay aboard?"

"We saw that it would be comparatively safe to stay. After you leaped, the ship continued to slow down."

The machine-men were aware of a shrill, despairing melody from where the professor had left Armina. The other music-monster was first to respond, and his haste to reach his distressed comrade met with ludicrous failure. Unprepared for the strange influence of the degravitators he wore, the music-monster took two or three unstable movements and tumbled into a gyrating somersault, sprawling upon the ground.

In dumbfounded despair, Armina was trying to walk toward them. He had divested himself of the gravity nullifiers and like a man with an overwhelming burden he was staggering toward them, his muscles bulging, his eyes dilated and every lifting of his lower legs accompanied by a super-effort. His upper appendages hung limply at his sides, and his breathing came in laboring sobs.

Hurrying to where Armina had left the gravity nullifiers, the professor retrieved them and replaced them on the ankles of the music-monster. Instantly, Armina's fatigue disappeared as if by magic, and the change was manifested no more surprisingly than in the expression on his face. In confused relief, he started forward once more, staggered, righted himself and then walked carefully toward the space ship with the professor. Once, the professor seized him as he was about to duplicate the previous gym-

nastic contortions of his companion by an attempt at quickening his pace.

"Not until you two are more acquainted with the degravitators," warned the professor. "It takes time and practice before you can become accustomed to walking with them, let alone running. You will take some bad spills unless you are careful. And if you value your lives, do not remove them as Armina did just now."

THE two music-monsters were more deliberate in their movements from then on, and not even the prospects of alleviating their hunger caused them to forget the penalties of haste. Armina was first to reach one of the plants which towered slightly above his head. Long, drooping leaves arched away from a peculiarly marked stalk whose top rounded into a purple-tinted ball. The general color of the vegetation was brown. Here and there, the younger growth was yellowish, while slate-colored stalks were not so numerous. Many of the stalks were gone as if they had been removed by someone or something. Armina was going to eat, and his companion, arriving behind him, prepared to assist his companion in breaking off the seemingly delectable stalk from its base.

Whip-like tendrils wrapped themselves sinuously about the two music-monsters and the leaves folded devilishly caressing about them. They struggled fiercely, but the tough tendrils held like steel. Emitting a weird symphony of surprise, rage and fear, the two music-monsters battled and tore at the plant, Armina ripping and tearing at the tough, leathery stalk and leaves with his hook, his companion too pinioned to permit him to reach a weapon. Where the hook sank deep, there was immediate-



ly issued a thick, purple liquid which coagulated almost instantly, leaving a shining, dull surface.

"Carnivorous plants!" 29G-75 exclaimed. "We have not seen such things for many a journey!"

Already, Professor Jameson was hurrying to the rescue of the hopelessly entangled music-monsters. He played his heat ray upon the base of the plant, knowing that as soon as it was cut from the ground it would weaken and die. The plant writhed and whipped its leaves frantically like a creature in pain, the tendrils constricting with such strength as to choke off the music-monsters' weird cacophony and turn them blue in the face. And then came the unexpected which surprised the machine men and left them strangely impressed. The plant screamed.

Its leaves in a frenzy of motion, an opening in the purple ball appeared, and from it there issued an indescribable scream, one of the most awesome sounds ever to fall upon the mechanical hearing of the machine-men. If the fire-dwellers had proved difficult to kill with the heat ray, the case of these carnivorous plants proved quite the opposite. In a final frenzy, with a dying screech which chilled the blood of its two prospective victims, the plant sagged and commenced to wilt, its tendrils releasing their grip and jerking spasmodically, falling to the ground bent away from the spot where the professor had applied his heat ray.

Shaken and unnerved, the two music-monsters were speechless, for once without a song, while they got back their breath. It was the closest either of them had ever come to dying, although Armina had thought the plunge from the sky the most horrible sensation he had ever ex-

perienced. The humor of the near tragedy became apparent to the professor.

"You came to eat them; they nearly ate you; they are of a vegetable character and prefer a diet of flesh and blood; you are flesh and blood and are strict vegetarians. What contrasts."

"You can eat now," observed 29G-75.

"I am not hungry," said Armina. "I seem to have lost my appetite."

The music-monsters did, however, eat of the fallen plant later on, after more of the strange plants had been examined, and they found their repast both delectable and satisfying after their fast on the space ship. Careful examination of the tall plants which grew quite numerous over the plain, showed that many creatures had been captured and digested, their white bones strewn about the base of the plants. The carnivorous species of vegetation did not, however, seem to find such an animal diet necessary, for those not fortunate enough to have captured an animal seemed healthy and luxuriant. Partly digested remains of a small animal gripped by one of the plants illustrated how the victims were digested. A sticky juice was exuded from the tendrils which enwrapped the repast securely.

**A** GAIN, the machine-men noticed the different stages in color and growth. The small, young ones were yellow. Most of the mature plants were brownish in color, with the purple top strangely suggestive of a head. Older specimens were grayish in color about the stalk, while the leaves and base of the plant were turned a purple color like the tops in earlier development. These latter specimens, the machine-men agreed,

were older and more advanced. What they did find difficult of explanation were the dead, abandoned plants *minus* their stalks.

"Some creature around here is more powerful than these plants and robs them of their stalks," observed 29G-75 reflectively. "It is a good thing to know. We shall have to be on the watch for them."

"The plants themselves possess tremendous strength," Armina reminded them.

"Anything here that could live under these conditions would have to be strong," said 948D-21, "just as the Ooours were so much stronger than the Uum."

"There is one piece of evidence that stands against the plants being subdued by force," the professor stated. "The leaves are intact, showing that there could have been no struggle. It is possible that the stalks are removed after the plant dies."

The machine-men made another startling discovery as they wandered among the placid appearing plants waiting so silently and quietly for victims. They recognized familiar shapes, globular and possessing many small tentacles, entangled in the twines of the carnivorous plants. They were Eiuks.

"Evidently they are capable of living here, too," the professor observed. "Their remarkable qualities of becoming living balloons during the day make them resistant even to the gravity here."

In examination of the various exhibits consisting of the living plants and their dead victims, 454ZQ2 stepped too close to the plant they were examining, brushing the long arched leaves with his tentacles. Instantly he was seized and gathered to the deadly embrace of the vicious

plant, the tendrils playing, writhing and clutching over him in joyous ecstasy. The professor leaped forward with his heat ray, yet hesitated to see what 454ZQ2 might be able to do, realizing that here was no danger such as had menaced the music-monsters. The strength of the plant was amazing, yet here in this plant there was no hard exterior such as had characterized the fire-dwellers. The metal tentacles bit into the tendrils until the machine-man was empurpled with the plant's fluid. Jerking and flailing his tentacles, the machine-man ripped the leaves into ribbons and belabored the plant to a purple welter with kicking feet and lashing tentacles.

The two music-monsters were amazed and impressed by this demonstration. They had been helpless in the embrace of the plant which had captured them. The machine-men had effected an easy victory. On the other hand, the fire-dwellers had proved to be more of a problem to the Zoromes than to the music-monsters, although at no time except in the fire country were the machine-men actually endangered in physical combat.

The machine-men and music-monsters spent the night in the space ship. They had not yet decided what was to be done. During the night, strange noises were occasionally heard outside, yet none of them investigated beyond peering out of the space ship. Once, 454ZQ2 had seen dim forms flit out of range of his body lights. Pursuit was considered inadvisable under their present circumstances.

**I**N the morning, several discoveries were made. For one thing, strange tracks were found, and another closely linking feature was the absence

of several stalks from the carnivorous plants which were of the aged variety. Tracks surrounded the old plants. Evidently creatures of some kind had come in the night and carried off several of the stalks. His curiosity arisen, the professor claimed that the next time the nocturnal sounds were heard they would turn out with the ray guns and surprise the marauders. One strange circumstance seemed especially inexplicable. One set of tracks led to a missing stalk and then disappeared. Whether the creature had been coming or going was difficult to ascertain from the strange pattern left by the feet, but there was only one set of them, and the thing, whatever it was that had robbed the plant of its stalk, had travelled in but one direction. The suggestion of 29G-75 was the most plausible.

"Whatever they are, they have wings, or else they are able to rise like the Eiuks."

"It was certainly not the Eiuks, for they are preyed upon by the plants."

"Perhaps," offered 948D-21, "the old plants are unable to resist the Eiuks who rise up with the stalks."

"It is improbable, for we should have seen the shining globes of the Eiuks had they come last night," stated the professor. "Besides, the Eiuks do not leave tracks like those we saw, assuming that those who took the stalks made the tracks."

Taking council, the four Zoromes decided that on the following day, two of them, 454ZQ2 and 29G-75, would don the mechanical wings and the degravitators and head back upon the long journey to the fire country upon another side of the planet fragment. Professor Jameson estimated their position as roughly sixteen thousand miles from the land of the music-monsters.

"How will 744U-21, 20R-654 and the others, necessary for the repair of the space ship, be able to get back here?" 454ZQ2 posed the ultimate consideration.

"You can carry extra mechanical wings and gravity nullifiers," the professor instructed them. "Of course, the degravitators will be necessary only above this end of the fragment. Instead of crossing the three thousand miles of this country directly to the thicker side of the fragment, it is more advisable to go directly to the thin facet which is less than fifteen hundred miles distant and then cut diagonally over upon the thicker side of the planet. You will experience easier going and the difference in the distance will be more or less negligible."

Again that night, the strange noises were heard, this time at a greater distance, and being prepared, the four machine-men hurried out cautiously into the dark. The music-monsters remained behind in the ship. For one thing, the latter possessed little stomach for the unknown terrors of this strange land, where they had to be careful about walking with the gravity nullifiers. Then, too, the professor considered it inadvisable for them to hazard running against one of the sinister plants in the dark. These plants were man eaters, had the music-monsters been men instead of what they were.

## CHAPTER VI

### MYSTERIES OF THE NIGHT

THE machine-men did not find it necessary to risk apprising the nocturnal unknowns of their presence with use of their body lights. A strange glow which the machine-men readily recognized pervad-

ed the landscape, casting a dim, ghostly radiance upon the weird scene beneath the starlight.

The Eiuks had dropped from the sky. There were at least a hundred of them, the professor estimated, and immediately he gathered the significance of so many more of them than he had ever seen descend upon Ui. The greater gravity was sufficient to pull down many of them involuntarily when their gaseous propensities were at the lowest ebb. The machine-men had never known whether the Eiuks had descended voluntarily or not. Like the carnivorous plants, the Eiuks did not seem dependent on flesh and blood for sustenance, but they seemed particularly ravenous for it, when the opportunity offered. In that particular, Professor Jameson likened them much to the leech and mosquito of his earthly life.

Already, several of the shining globes had met the misfortune of falling into the eager clutches of the tall plants, and they represented a weird appearance as the tendrils and leaves embraced their brilliance, tinting the ground about them with a purple glow as if shades of the same color had been drawn upon the brilliance of the Eiuks. The latter presented a weak resistance, and soon their bright glow waned as death claimed them and the plants eagerly sapped and drained their vitality into the tendrils and leaves.

To this, the machine-men paid but scant, secondary consideration. The ghostlike, flitting forms among the vegetation riveted their attention. Ominous and of sinister, evil portent, they scampered excitedly among the falling globes. Each one seized an Eiuk and started off for the distant hills, bouncing away as the alarmed denizens of the upper air tried to

break free. Instinctively, aware of their peril, the rest of the shining globes arose and bounced about, trying to escape the clutches of the snatching, leaping creatures. Between them and the horrid, waiting embrace of the plants, the Eiuks were hard set, but now they were becoming more difficult to capture.

Creeping closer unobserved, the four Zoromes watched the deadly contest and were impressed by a strange coincidence of the carnivorous plants and the creatures from the hills both intent on capturing the Eiuks. When one of the slinking creatures seized an Eiuk, there came the flash of purple light shining through the clutching arms, similar to its manner of glowing through the leaves and tendrils of the plants. The machine-men wondered why the plants did not catch these other marauders as well as the Eiuks, yet they had previously figured that it was these same marauders who had carried off the stalks from the plants.

There was much to be understood, and to understand it better, the machine-men walked closer to the scene of the chase, stepping into the *aura* of pale radiance hanging about the vicinity of the Eiuks like a transparent fog. They were immediately seen by several of the roving hunters who had not yet made their captures and now joined their long file of companions scampering off towards the hills, each lighted by a living torch held high, so that their path of retreat became marked by a bobbing, serpentine column of gradually dwindling globes of light. Before the machine-men could fairly have their ray-ejectors ready for the inevitable, the things charged down upon them viciously. Most of them fell before the blazing death which swept into

their vitals, but a few reached the machine-men unscathed and wrestled with them.

Cold, curling tentacles, snakelike, wound about the four Zoromes and roved feelingly over their metal heads and bodies, showing surprising strength and tenacity in their grip, as they sought to drag down the machine-men and choke and smother them. At least, such was the professor's fleeting impression. If this was the expectation of the strange things, the anticipation became rudely shattered. Even as they had expected to conquer, were they conquered.

IT was all over so soon, it had happened so rapidly, that the machine-men were surprised to find themselves standing alone among the scattered dead upon whom shone the ghastly, funereal radiance of the bobbing Eiuks. The machine-men had their first opportunity for a close examination of the evil intentioned things they had seen only as indistinct shadows in the semi-gloom of the weak light spread by the shining globes from above the stratosphere.

Professor Jameson was met with one of the greatest surprises of his entire career among the machine-men of Zor. The dead forms scattered over the ground, fallen before the terrible heat rays and in actual combat with the Zoromes, were the missing stalks from the carnivorous plants! They had been alive, sentient and capable of locomotion! Here was the reply to the question of the missing stalks. For several moments, the machine-men were too stunned with this electrifying discovery to reason out the solution.

"Are they plant or animal?"

"Both."

"No—they are animal now; they were once plants."

"They grew as plants—"

"And became animals at the proper time of evolution."

The lower half of the stalks branched off into four legs possessing tiny, round feet. When drawn together, they appeared as a solid pillar. The machine-men recollected striated lines running the length of the stalks, but they had attached no peculiar significance to them, partly hidden as they were by the broad, arching leaves. Now they knew why the plants had screamed. It had been surprising that the plant-animals had made no outcry during the recent fray, yet the machine-men had burnt them down and throttled them so quickly that their silence had been more or less enforced. Something more they noticed now that they had not seen before. The purple head possessed several small knobs which the machine-men identified as optics. The purple liquid, the life blood of the things, had impressed them from the first with its thick qualities so divergent from usual plant life. But they had catalogued it merely as a characteristic peculiar to this type of plant.

THE tiny points of shifting lights marked the position of the sentient stalks that had captured the Eiuks. In the distance on all sides, the machine-men saw more of the Eiuks falling in companionate clusters into this strange end-country of excessive gravity. Those of the Eiuks, in the group fallen in the vicinity of the wrecked space ship, still bobbed about among the silent, waiting plants. The machine-men wondered if the plants were watching with their beady eyes. The tall stalks had taken on a new and ominous significance.



The next morning, 29G-75 and 454ZQ2 equipped themselves and set out upon their long journey. Both 948D-21 and the professor would have liked to have gone, too, but it was their duty to stay by the ship. Had this necessity not existed, there would have been a problem presented by the two music-monsters. The latter were told the strange story of the missing stalks, and how the long tendrils of the plant were really living tentacles. It would be long before the machine-men would reach the edge of the fire country and as long again before they returned with companions. What if 744U-21 and the rest of the Zoromes should not be there when 29G-75 and 454ZQ2 terminated their long journey? Professor Jameson had reason to believe that the machine-men would stay where they were in the land of the music-monsters. At least, they would establish a base of communication for the lost ship and its occupants. Many possibilities presented themselves, yet the two waiting machine-men realized that their adopted course was the only present solution. They hoped that 29G-75 and 454ZQ2 would reach the edge of the fire country without mishap.

They had much time during their enforced wait to observe the carnivorous plants in their various stages of evolution. Occasionally, one of them in company with the music-monsters roamed far afield, penetrating to the hills where the plant-animals lived in packs within the dense brush country. It was in the lowlands, where the ship had fallen, that the plant-animals became developed. At an early phase of their development, seeds and pollen were scattered to the winds. One plant never grew more than a single stalk, and when the stalk became sufficiently developed to leave

its vegetable state of existence, it disengaged its feet which had become loosened and gradually separated from the rest of the plant and left under cover of darkness, abandoning the plant as if it were an old chrysalis.

Whether the plants possessed eyesight during the vegetable stage, the professor was unable to accurately ascertain, but he came to believe that the older ones did when he had employed the simple experiment of holding up one of the music-monsters close to the purple head of a maturing plant. The fixed eyes became animated with a subtle gleam from their baleful depths, and without the usual necessity of contact the tendrils commenced to quiver excitedly and reach out for the delectable morsel. Sometimes, one of the machine-men would fly alone farther than it was possible to go in company with the music-monsters. Beyond the hills lay another low plain where the carnivorous plants grew both profusely and luxuriantly. Beyond the plain rose the mountains. It was in these mountains that the Eiuks resided, the machine-men believed.

There were other species of animal besides the plant-things and the Eiuks, but mostly they were smaller, inferior creatures. A close, short verdure grew all over the plain which also supported other forms of plant life, much in minority to the carnivorous species which seemed to dominate and absorb nutrition from the ground. In the hill country which was thick with bushes and other types of vegetation there were none of these hideous plants.

Professor Jameson advanced a theory, dealing with the tremendous gravity of the end territory, which explained tentatively this strange

phenomenon of the hybrid plant-animal species they had discovered.

"Life is a determined factor and cleverly surmounts almost insuperable obstacles, becoming readily adaptable to the environment in which it finds itself. Consider the fire-dwellers, for example. Their situation is no less astounding and miraculous than what we find here. A strong type of life is required in this end zone. Some of the creatures here have developed without the vegetable beginning, yet there is a peculiarity of the plant-animals, one which necessitates their start in life strictly as a plant. When young, they must be very weak and unable to start life in mobile form. The plant-animals developed like the rest of the various forms of life from a simple cellular structure which became first a plant and then an animal. In the early, weaker stages, the necessity of locomotion for seeking sustenance is done away with by their remaining in one spot and drawing life from the soil. They are also carnivorous. I believe we shall find that in their strictly animal stages they are entirely carnivorous."

Armina, more venturesome than his companion, was not satisfied until he had killed one of the plant-animals in combat and brought the carcass back to the space ship, incidentally winning a bet his comrade had made on the assumption that he could not do it and would have to fall back upon the help of the machine-men. The two music-monsters had skinned their late enemies and cured the hides. They had derived much amusement in throwing chunks from the carcasses of the fire-dwellers to the carnivorous plants. Deprived of their dice and metallic squares, the two had gambled lavishly in all sorts of imag-

inative forms, even as to guessing the exact time the horizon would cut the rising sun in half, using instruments of the Zoromes for reckoning the time. Their funds were practically unlimited, since they had redeemed the pelts of their erstwhile enemies, and they gambled to their hearts' content, fortune and prosperity smiling first on one and then on the other.

After their first clash with the machine-men, the plant-stalks kept away from the vicinity of the space ship, staying in their hill country. The night following the killing of so many of the plant-things, they had returned and found the carcasses of their brethren. When the sun rose again, the dead were gone.

TIME passed, and sunset followed sunset. The music-monsters commenced to fail in health from the tremendous attraction of gravity, despite the degravitators they always wore and those they kept installed in their living quarters. It was still much too early to expect the return of the machine-men. When they came, the professor intended that Armina and his companion be carried on the wing to the not so distant area of lowest gravity. There, they would recover rapidly, for the resistance would be even less than in their own country which represented the antipode of the facet on which dwelled the Ooours.

So the machine-men were completely surprised when ahead of schedule some very small blots appeared in the sky. Of all of the ever watchful machine-men, it had been the lot of 948D-21 to first sight them. The blots materialized into two varieties, flying machine-men and round globes.

"The Ooasi!" 948D-21 exclaimed. "How did they happen to come?"

His question remained unanswered until eight machine-men flew down from the sky, leaving the metal Oaos circling on high. It was 744U-21 and 6W-438 who explained matters.

"When 29G-75 and 454ZQ2 returned on the wing without the space ship and told us where you had fallen, we knew that a long and arduous task lay before us of getting ourselves and the necessities for repair of the ship here into this isolated end territory facing the handicap of such immense gravity, so we sent a winged courier down over the other side of the planet fragment to the land of the Urum for their aid."

"What it would have taken us an exceedingly long time to accomplish, they can expedite. We are all here, 21MM392; that is, the remainder are at the world's edge bordering what the Urum would probably call the Land of Greatest Exhaustion."

"Why did they not come, too?" 948D-21 asked.

"Most of us were brought here to the edge of the end zone in the aircraft of the Urum, accompanied by the Oaos. Eight of us came on the wing equipped with the degravitators which you sent to us by 454ZQ2 and 29G-75. The Oaos came with us directed by remote control from the airships of the Urum. The Urum dare not bring their airships into this end zone or come themselves. The Oaos, of course, operate on gaseous principles analogous to the aerial faculties of the Eiuks. The Urum and the rest of the machine men are waiting at the world's edge."

Soon, all the machine-men were about the wrecked space ship with the necessary material and facilities brought from Uri for its repairs. 29G-75 and 454ZQ2 had taken back with them exact, detailed accounts of

the damage done the space ship, both inside and out. The damage was greatest to the hull and compartments nearest the point where the ship had struck the ground.

MANY long days and nights of intensive, untiring work were necessary. Often, the machine-men were surrounded at night not only by their own illumination but by the light of the Eiuks as well, presenting a weird scene, down upon which the animated plant stalks gazed fearfully from the distant hills, as near as they dared approach the mixture of natural and unnatural brilliance. The first trip back to the base, situated at the world's rim bordering the flat world of least gravity and the end zone, had seen the departure of the two ailing music-monsters singing their duo of melancholia. At the base, they had found many of their companions who had accompanied the Urum and machine-men in the airships. The recovery of the two music-monsters was rapid as they joined their companions in jumping and skipping in gigantic leaps much like those of the Ooaur's by the walls of Ui.

Immensely rich in the square bits of fire-dweller hide which the two music-monsters had insisted in bringing out of the end zone, and thus loading down a single machine-man with them and with nothing else, the music-monsters made gifts among their companions and gambled so recklessly and rabidly that the fever spread to the curious and interested Disci of Uri. Long geared music-monsters squatted incongruously with the diminutive Disc creatures and passed much time in gaming, the latter much impressed with admiration and wonderment at the musical innuendoes of their new friends whom they under-

stood only in pantomime or through the able interpretation of the Zoromes. Much to the delight of Armina and his companion so long "imprisoned" by the necessity of wearing gravity nullifiers, their companions had brought the many pictured dice and square bits of metal.

Only once did several of the Urum, much laden with gravity nullifiers, venture into the end zone in company with similarly equipped music-monsters and machine-men and witness the amazing phenomena of the carnivorous plants and watch a nocturnal disengagement of a ripe stalk. The sight of the gently falling Eiuks were familiar sights to the Urum, though never before had they seen so many of them descend at one time. A strange sense of satisfaction enveloped them as they saw the carnivorous plants make their catches of the Eiuks who came too close. Too often had the Disci fled into their homes in terror from the nocturnal raids of the shining balls.

When the space ship was at last capable of flight once more, the entire assemblage was taken for a trip low above the end territory of the planet fragment before once again revisiting the land of the Urum and then

back to the forests bordering the fire country. With the various functions of the ship once more intact, the gravity of the end zone remained a negligible factor.

The machine-men and music-monsters lingered in the land of the Urum for some time, beside the gaunt, towering mountains which stretched their fingers into space, before returning to the forest retreats of the music-monsters upon the facet opposite the Land of Exhaustion. Here, they renewed their visit so abruptly interrupted by the unexpected raid of the fire-dwellers.

Finally there came the irresistible call of unseen worlds, the lure of the universe. With the farewell melody of the music-monsters behind them and the silent star symphony before, the machine-men departed from the huge, rugged, misshapen world on which they had encountered so many strange adventures among stranger forms of life. Behind them dwindled the glowing oval of soft, steady light which marked the retreating planet fragment; ahead, many light years beyond the system of worlds they were leaving, stretched a dense, black pocket of emptiness where no stars shone.

### THE END



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## CONCLUSION

### CHAPTER XII

#### THE CLEVEREST MAN ON EARTH

**W**HEN we returned to consciousness, we were still in the Debating Chamber, yet in some unaccountable way it was different. The position of the central table had changed; some of the furniture in the room, sparse though it was, had altered . . . .

Very slowly we got to our feet.

It was night now, where formerly it had been mid-day, but the automatic lights of the Debating Chamber had functioned and illuminated the great room in soft white radiance. Through the window we beheld New York, but . . . . I caught in my breath and stared intensely.

"New York—2004!" muttered Lan Ronnit, taking the words from my own lips. I held my forehead and tried to sort the problem out. Anton Frot looked up at the sky, then gave an exclamation.

"Jupiter!" he ejaculated, pointing. "You're right, Ronnit—this is the sky of 2004."

"But—but what's happened?" I asked dazedly, and we all looked at Frot intently, Templeton and his fel-

low-directors standing in a little knot behind us.

"We've gone back to our natural time—2004," Frot said slowly and pensively. "Either the time-altering machinery on Ondon took some time to release its effect after we destroyed Zagribud—or else something else is responsible. Everything below is just as it ought to be for 2004. The entire population is back. Paradox though it is, we are now about twenty thousand years prior to the time Jelfel was even born! There is Jupiter, yet to our own knowledge we flung it into the sun in the year 22,000. Whatever it may be . . . . we're back to normal. So presumably, are all the other ages. All in their rightful times." He stopped and pondered the matter over.

Templeton came forward and seized Frot's arm tightly. "Frot, does this mean the end of Jelfel?" he demanded grimly.

"I don't know," Frot answered. "We don't even know why we've come back to normal time like this. Something must have intervened between Earth and Ondon and broken the power that was holding us in a false time. If Jelfel is still alive he will be . . . . let me see . . . ." Frot paused and thought, then a bright light entered his eyes. "He will, of course, be still in 25,000—where we were. But here's the





*The focus of the almost uncanny space-television apparatus changed a trifle and we beheld a three-quarter length picture of Jelfel, entirely free from all tremor, before an apparatus similar to our own.*

point. If he was on Earth when this happened he would be moved backwards with us—bound to be, and that might have meant his dissolution by traversing a time already traversed. On the other hand, if he were in the void, or anywhere away from Earth, he'll be still in the era 25,000, as I said at first. That's rather amusing really—he'll be faced now with the civilization which begins the Age of Intelligence—the one era he tried to avoid because of their knowledge. 30,000 is, of course, the actual Age of Intelligence, but the rightful people of 25,000 are brainy enough in all conscience, rising as they do from the shattered civilisation of 22,000—the Age of Problems—which we destroyed ourselves on our earlier adventure."

"His machinery in the valley. What of that?" Elna asked.

The mathematician shrugged. "So far as I know it will still be there in 25,000," he answered. "It is the law of time. There is only one real way to solve the problem—"

"Go to 25,000 and find out," said I; but to my surprise Frot shook his head.

"No, Lee, the way to find out is to go right forward to 30,000—the Age of Intelligence itself, and learn what has happened in what, to them, will be past time. Then we get along a bit."

"That is a splendid suggestion," Templeton remarked. "A pity we didn't think of it before. However, it is not too late now. I suggest you all leave for the Age of Intelligence tomorrow. Spend the night in your own quarters, all of you. I will have work found for these two Jovians, and tomorrow you can visit Valma, Master of Science of the Age of Intelligence. You know him, Lee?"

"Surely," I responded. "What time-liner pilot, in his travels, has not heard

of him?" I smiled faintly. "A very true phrase is attached to Valma . . . They call him the 'cleverest man on Earth . . .'"

**T**HE Age of Intelligence, 30,000 A.D. represented the Third Intellectual Cycle in the history of the Earth. Firstly came the First Intellectual Cycle—the Egyptians, 1700 B.C.—then the Age of Problems 22,000 A.D.—curiously enough controlled by Jelfel (which Age of course still occupied the same position in the time line, even though our particular dealings with it had long since ended) and lastly 30,000, the greatest Earthly civilisation of all . . . . A civilisation grown up from the ruins of Jelfel's own civilisation of 22,000 after the Earth had been blistered with solar fire from the hurling of Jupiter into the sun.\*

Jelfel had once told me that his own Age of Problems was the cleverest intellectual age in Earth-history, and at that time, bemused by his brilliance, I had been ready to believe it. But, during my visits as a time pilot, I had seen glimpses of the superb scientific powers of the Age of Intelligence, and also had heard the comments of scientists in other Ages who had sought the advice of the Age of Intelligence in their work. Always had Valma, Master of Science, provided the perfect answer—because, being at the end of Earth time, he knew all that had gone before him. He was a man backed by all Earthly knowledge . . . .

So it was that we set off in a private time-machine for the Age of Intelligence the following morning—a newly attired, refreshed quartet, and the only trace of our Ondonian experi-

\*Liners of Time. S.L.

ences being my own Jovian face and eyes.

Again we saw the normal world warp into the fourth-dimensional time line and vanish; once more we hurtled down the time-line, passing the Age of Problems on our way, until at last, thanks to our instantaneous time-switches, we merged out of the time-line into the Age of Intelligence, coming to rest upon the charted land ground at the rear of the T.L.C. Building, 30,000 . . . .

Being already accustomed to the vast city, I rapidly led the way to the chief research laboratories, and eventually, after some difficulty in explaining away my face, succeeded in gaining an audience for the four of us with Valma himself.

We were conducted into a type of consulting-room—an apartment of indescribable beauty, superbly furnished and delicately ornamented. Whilst we waited a system of colour vibrations played upon the opposite, smooth-faced wall, and for each colour there was a vibration that soothed our beings like the most gentle music.

Then suddenly Valma was with us.

How he came, he best was able to explain. Quite suddenly he appeared, through the solid walls and closed door, smiling in welcome. A neat white laboratory smock entirely covered his powerful, upright figure, whilst the amazingly deep-set blue eyes studied us from under arched black brows. The brilliant sunshine streaming through the sky lights illumined the essentially mathematical magnificence of his tall forehead . . . . Valma, Master of Science—the cleverest man on Earth!

"Ah, Commandant Lee—Miss Folsom," he smiled. "Indeed an honour, I am sure, to interview the Commandant of the Time Way. I observe your

face is slightly Jovian, but after your experiences that is not to be wondered at. Good day, Lan Ronnit—Anton Frot . . . ." He seated himself and regarded us with profound thought.

"You know all about our experiences in the void then? Of our efforts to overcome Jelfel? You must—mentioning my face," I said quietly.

Valma laughed softly. "My dear Commandant, there is such a thing as records," he answered. "Documents, sheets of pure gold have engraven upon them the history of the struggles of one Commandant Sandford Lee to outwit a Jovian menace; the story of how that Jovian, Elnek Jelfel, was once outwitted and his planet flung into the sun; then the even more remarkable story of his return, and of how he was at last destroyed, and of the small part I took in doing it—though oddly enough, by ordinary standards, I was not even born then! But as you know, as I know, there are two states of time, as you once explained to Miss Folsom when you first struggled with Jelfel.\*"

I was about to speak when Valma went on again.

"As you are perhaps aware, Commandant, my entire civilization has been living under the most trying conditions lately, due to our being pushed forward some twenty-three thousand years. Really, most amusing. We have been living like savages in a dead world, and only a few hours ago did we revert back to our natural time. All due to Elnek Jelfel, of course."

"It is about him I have come to talk with you," I said earnestly.

"Yes, you have come to seek my counsel," the Master of Science nodded. "It has been written in Time that you came to seek my advice, and

\*Liners of Time. S. L.

I gave it to you—so I must do so. Indeed, no effort of mine can stop it. Time is always as writ . . . . Now, explain matters to me.”

As carefully as possible I made all the details clear to him, and when I ceased to speak he smiled rather grimly.

“As I read the cosmos,” he said at last, “I see that Elnek Jelfel has again outwitted you, Commandant! You have been made a complete fool of!”

“What!” I exploded.

“Sorry—but only too true,” Valma affirmed. “I can mentally see what has taken place . . . . Upon the death of Rath Granod, Ruler of Zagribud, Krot, one of Granod’s advisers, discovered the fact, and unable to decide what to do, radioed to Earth to Jelfel—Granod’s successor in title. Jelfel’s advice was to do nothing until he came to Ondon. Jelfel did arrive on Ondon, by his sixth dimensional Rotator—then he allowed you to go as far as you would, mainly because he was interested in the possibilities of Anton Frot’s sound-vibration projector. But, before that sound-projector could be fired he shielded Zagribud—indeed all Ondon—with an atomic screen, and so deflected all your sound vibration away into the void. Each time you looked into your telescopic refractor the six of you saw the image Jelfel *willed* your minds to see—”

“Good Lord! The dizziness—the numbness of my brain!” I ejaculated abruptly, suddenly recollecting the occurrence. “Yes—yes. Go on, Valma.”

“The vision of unharmed Zagribud, then afterwards the ruined city, were only figments of Jelfel’s tremendous will-power. The white mist was genuine enough, being his curtain of atomic vibration—but actually the mist *did not clear away*. It only seemed to do so by his thought influence upon

you. Further, the guards of the powerhouse were blown out of existence by yet another of Jelfel’s remarkable creations. His sound-deflecting screen must, at best, have been a hastily conceived process, but at any rate it was effective. So that sound-vibration was hurled forth—but into the infinite. Ondon, however, was slightly shifted in his orbit by the colossal shock. The vibration, then repelled, travelled in a straight line from Ondon’s surface, and finally it struck Ramino, Paliso and Ondon’s neighboring world, also slightly shifting him in his orbit. Ramino partly absorbed the vibration, and partly, by its very composition, again reflected the vibration, until it suddenly struck the time-altering beams passing through the void from Ondon to Earth. Instantly that terrific mass of sound-energy exploded, and so also did the influence holding Earthlings in wrong periods of time. That was when we reverted to normal . . . . So, Frot, your apparatus did some good after all . . . .”

Valma paused.

“So you see, my friends, because Jelfel is on Ondon, he missed being flung back in time, and incidentally into death. And Zagribud is still standing—and the year he is in is still 25,000. He will know from his telescopic apparatus that the time deflecting apparatus is out of action—that people are normal again—and will immediately set to work to repair the damage. But, by the same method that doesn’t solve our problem—and from our records it is not altogether clear *how* he was overcome. We know he has—and will—meet destruction, but it is left to us to do it. The past can tell us nothing. It merely says we were responsible in doing it . . . .”

“His Earth headquarters will still be in 25,000,” I remarked. “I suggest

"we set out to destroy those, first."

"I regard the endeavour as a waste of time, Commandant," Valma answered calmly. "If we do that, we accomplish nothing. It is *Jelfel* we must destroy—not his works. No, I can surely devise a better plan than that."

I shook my head doubtfully. "*Jelfel* is a brilliantly clever scientist," I remarked. "He is determined to have Earthlings, and before he's done he'll succeed."

"Undue pessimism, surely? It is written in time that he fails . . ."

"Records may be wrong," I grunted.

"Truly—truly," Valma confessed, arching his eyebrows. "Still, I am called the Master of Science because I am the only man on Earth who understands time and space exactly as it ought to be understood. I have to follow what is written in time—I cannot avoid it. Therefore I will fling my own challenge through the void to this master-devil. You shall see the scientific power of 30,000, my friends!"

I inclined my head in silent acquiescence. "Very well, Valma. Far be it from me to even try and understand the workings of the mind controlling the cleverest man on Earth," and he smiled faintly at the compliment. . . .

## CHAPTER XIII

### THE FALSE EARTH

THE days that followed in the Age of Intelligence were a delightful relaxation after our varied activities in time and space—and with each passing day we began to apprehend the amazing powers of Valma, and realized it then more than ever when he was designated as the Master of Science. I had been willing previously to hand the palm for scientific genius to Elnek *Jelfel*, but those

days with Valma, in our great campaign for the final—as we hoped—extermination of the Jovian menace, left me completely bewildered by the man's almost incredible knowledge of time and space. . . .

On the fourth day, at his request, we accompanied him to the research laboratories—an edifice of amazing proportions, equipped with every known earthly scientific device, built through the accumulated knowledge of Earth's intellectual centuries. In Valma there was concentrated all the knowledge of the Egyptians at the bottom of the Time-Line, the Age of Problems itself, and centuries of achievement added to that knowledge again.

"I have decided upon the plan of action," Valma said quietly. "We can outwit *Jelfel* up to a certain point, then something else will intervene to finally obliterate him. It is not written in Time what that something is. My mind is blank when I try to conceive the matter. That being so I will not tax the delicate structure of my brain unduly. Our task, my friends"—he became gently impressive—"is to give *Jelfel* no opportunity for thinking that he has failed in his efforts!"

"But—but surely that is the wrong method!" I protested.

"Anything but it! Listen, my friends. Our calculations have shown that *Jelfel* knows of the collapse of his machinery for placing civilizations in the wrong time; he is, therefore, rapidly rebuilding another machine so that he can continue his efforts—for, now he is undisputed ruler of Zagribud, he sees glorious progress ahead if once he can get Earthly bodies for himself and his immediate intellectual contemporaries. . . . It appears, from my mental researches, that the recoil from the explosion of



his time-altering beams has blown his machine to pieces in Zagribud. Now in roughly twenty-six hours the second machine will be completed and he will again shift Earth's civilizations forward twenty-three thousand years. If that happened you could—indeed you could have done so all along—go forward to another Age and escape him by being in a time ahead of his existence, but that is not the way to exterminate him. So, you will stay and fight, as I will. . . .

"If that happens, it will mean that once again Earth will be dragged to Ondon—this time by remote-control magnetism. You know the principles of his magnetism, and of how his machinery absorbs Earth's natural negative electricity and makes therefore a perfect attraction for Ondon's positive electricity? Well, his remote control system consists of a mass of machinery exactly duplicating that which he has on Earth in the valley in 25,000. Hence, he will control Earth's passage through space to his own world—and, he will be quite sure he succeeds—whereas actually he will do nothing of the kind!"

"I'm afraid I don't understand," I remarked, puzzled. "Surely, if we destroy his headquarters in 25,000, we at least are sure of Earth being safe?"

"Certainly—but only until he thinks out a new system," Valma answered. "No, my friend, that is not the solution—besides to do that would kill my own idea. Listen to the plan I have arranged. Elnak Jelfel is going to be subjected to what we might call celestial juggling. He will capture a *mythical Earth* and draw it to Ondon; he will *not* really put civilization twenty-three thousand years forward—and lastly, he will find, when it is too late that the mythical Earth is really the shield of deadly weapons, which we

will use to destroy him and Zagribud. The destruction of Zagribud may, or may not kill him—I forgot the unknown power that is destined to be his final master. . . ."

"You have your plans well laid, Valma," I admitted; "even so, I don't follow how he is going to capture a mythical Earth, as you call it, or how it will be the shield of weapons—or how you'll stop him from altering time."

"I assure you it is not at all difficult," the master-man returned. "Step this way, my friends. . . ."

HE preceded us into his instrument hall, eventually coming to a halt beside an instrument resembling an enormous telescopic reflector—a great tower of pure, glittering gold, created by the ton by transmutation of elements. In my own time the value would have run into incalculable millions.

"This," Valma explained, "is the Time-Line Adjuster. Firstly, let me outline to you *how* Jelfel moves people ahead twenty-three thousand years. I have studied his methods, and it appears his system is this. . . . By a compression band he forces down the fourth-dimensional time-line, which as you know flows as a steady river, with the result that Earthlings are caught up in it. That causes a sense of acceleration, and finally, unconsciousness during transit. Then, when he has moved them on twenty-three thousand years he allows the time-band to move back into position, *but* and here is the vital point, my friends, he generates a negative force which is in opposition to the time-band. Thus it is that the normal flow of time—which would instantly fling humans back to their rightful time the instant the time-line is removed—is held rigid—

and so humans are kept in that advanced time. But, when that negative beam system was destroyed by the recoiling sound vibration, civilizations shot back to their normal places. . . . That clear?"

"Yes," said Anton Frot keenly; but Elna, Ronnit and I looked on dazedly.

"Splendid. Well, this Time-Line Adjuster will thwart Jelfel's efforts when he again tries to move people forward twenty-three thousand years. My machine radiates a force exactly contrary to Jelfel's system of negative-beam and time-line depressor—and also it will react so as to be in force in 25,000 instead of here . . . that is, the time Jelfel is in and will attack from. So, his efforts will be useless I fancy. Is that clear to you?"

"Go on!" I urged eagerly.

Valma moved to another immense instrument before continuing—this time an apparatus similar to a box of burnished bronze, and containing many lenses.

"With this I shall create the false Earth," he commented, as though the task was a trivial matter. "This machine also, like the Time-Line Adjuster, incorporates the necessary mechanism for projecting the image back into 25,000. Allow me to explain it to you. Firstly the machine sends out what I call a recoiling light-frequency into space—into the sky of 25,000. That light-frequency absorbs everything it sees from the sky of 25,000—which will be, of course, the Earth itself as seen from the void. The light-frequency, bearing this image, returns to this machine and is reprojected into time—in the sky, above the *genuine* Earth of 25,000. The image incorporates all the actual colors and is rendered three dimensional—that is, a solidity. Thus, a false Earth lies above the genuine one in 25,000. . . .

Now do you see the idea? By timing this projector I can make it appear that Earth is very slowly approaching to Ondon—or so Jelfel will imagine, when he looks through his telescopic devices—for this image, being an apparent solidity, will hide the real Earth beneath. As my machine has an infinite power beam, reaching to Ondon itself if necessary—and also as my focussing lenses can be made to enlarge the image until it actually equals that of Earth itself—using the void as my screen for projection—the illusion will be complete. . . .

"And behind that screen will travel space-time machines equipped with every known death-dealing device. Thus, when the image has reached a point near to Ondon—and Jelfel fully believes he's captured Earth, we'll turn upon him and come out from behind our screen. And Earth will be safe—for his time-apparatus will be useless as well. Your opinion, my friends. . . ."

"Astounding!" I breathed. "I could never have thought of that in all my life!"

"I am the Master of Science," he said calmly, and without a trace of egotism. "In our attacking space-time machines we will carry improved Frot sound-vibrators, heat-rays—"

"Heat-rays! "Lan Ronnit echoed. "But they're ancient weapons for this Age, Valma!"

"In the old form, yes," Valma conceded. "My heat-ray system is the limit in efficiency. I gather the heat of the sun, store it, and then project it through crystals of what I call solidified water globules. Water globules are perfect condenser-lenses, my friends. These globules are petrified and embodied in hundreds in one great lens. Hence the stream of sun-heat passing through this lens produces a

most terrific heat-ray. . . . "And now, my friends, to business. . . ."

He turned and strode actively about the great laboratory, summoning his assistants to his side. With the swift conciseness of a man who knows every intricacy of his craft, he gave instructions and shortly afterwards, before our very eyes, the necessary apparatus for our interstellar contest began to appear.

"These machines are of course the fundamentals," Valma remarked, nodding to the Time-Line Adjuster and the "False-Earth" machine. "The attachments have yet to be manufactured."

**T**HE process of the manufacturing was the most amazing thing I ever beheld in the Age of Intelligence. The mighty place became alive with curious beams and forces, the nature of which I could not even guess at. Bars of solid, shining gold seemed to rise from nowhere, enormous plates of pure copper arrived by the same startling process—until at last, after three hours of unceasing energy, the room was filled with orderly, tabulated machinery of infinite complexity.

"Quite in order," Valma commented, looking about him and rubbing his delicate hands gently together. "I think that is all for now. Everything is ready for use the instant I give the word. Now, my good friends, if you will come into the next apartment you shall see for yourselves exactly what is transpiring. . . ."

In the next apartment he extinguished the daylight with metal shutters over the glass roof and switched on the time-televisor, such as were used on regular time-liners, only on a much larger scale. The apparatus functioned, of course, on the same principles as television, only that the

images received could belong to past or future time as the operator desired. . . . A few trifling adjustments and the vision of New York, 25,000, appeared on the twelve-foot screen. I realized after a while that the image was coming from a movable transmitter on the roof of the T.L.C. Building itself. Presently a voice spoke in the darkness in the ceiling.

"Is that as you desire it, Valma?"

"Entirely," the great scientist responded in his grave voice. "Leave it at that angle, Ronnit. . . ."

"Yes, Master."

For a space Valma sat silent in his golden chair, gazing absently at the screen, its reflection casting his powerful, highly intelligent profile into sharpest silhouette.

"This, I hardly need to explain, is time-television, my friends; just the view that is collected by a transmitter. Presently you will see 'space-television'—which is television as it really ought to be. I— Pardon me a moment." He turned aside to an instrument in the darkness and listened intently for a moment. "He has just released it? . . . Yes. Excellent indeed. Release the machines."

The floor beneath our feet began to tremble slightly a moment later, as the monster machinery in the adjoining laboratory began to take on life and speed. Valma turned back to us again.

"My assistant has just informed me, according to his observations of Ondon in 25,000, that Jelfel has now repaired his time-altering machinery and is sending that beam to Earth to depress the time line and again send civilization forward. My machinery, now working simultaneously, should provide our friend with a complete illusion and render his efforts useless. . . . Watch the screen."

Again we looked, and almost immediately our attention became riveted upon the view of the sky in 25,000. Strange, swirling shapes were becoming visible in the noonday light—a hazy, indeterminable formation that very slowly spread from horizon to horizon. The bulk of the city of New York became covered, by almost imperceptible degrees, with the image of the false Earth flung out from Valma's astonishing machines. Above, in a yellow pall, we beheld the dim vestiges of a city, amorphous, and quite without understandable formation. Through this dull saffron curtain the sun shone with an obvious decrease in light.

"It is possible to see through the image when the light of the sky is behind it," Valma commented. "But it is not possible to see through it and view a comparatively dull solid like the Earth itself—so I fancy the illusion, to Jelfel, will be quite complete. However, we will see for ourselves how things look to Jelfel. . . . Come."

We moved to yet another apartment, again enveloped in the deepest gloom. I caught a glimpse of banks of massive insulators and coiled wires as I entered—then came a blue flash as Valma moved a switch into position and set into life several softly droning engines. Immediately we beheld yet another twelve foot screen, which gave us a vision as soon from a space-ship—that of rapidly leaving Earth behind us. I caught in my breath in a startled gasp.

"Light waves," Valma said in a casual voice. "Almost similar to Jelfel's own telescopic device, the difference being that this is space-television. It will therefore pass through all solids and requires no transmitter. There you see the Earth below in the void. As this televisior is now receiv-

ing the light from 25,000, by being deflected from the time-line, you are actually viewing the false Earth I have projected over the genuine Earth of that Age. How does the illusion strike you?"

"Why, it's perfect!" I exclaimed in delight, staring hard. "It's impossible to tell the thing is a fake."

"So perfect, it looks as though something's gone wrong somewhere," Elna commented.

"Nothing has gone wrong, Miss Folsen," Valma assured her, as the globe of Earth rapidly receded in the screen. "Beneath that apparent globe lies the real world of 25,000. Ah, we are now approaching the edges of the Solar System." Valma turned aside and, moving about a tiny red light, inspected meters, dials, and curious contrivances that glowed pale pink, then he turned back to us, as the view in the screen abruptly changed, seemed to swing round in space, then headed directly for a yellow solar system directly ahead in the cosmos.

"Just altering the light-receiving apparatus," Valma commented. "Hitherto we were catching Earth's light-waves—now we are tuned into Ondon's—going ever nearer as I increase the wave-length. Watch carefully. This promises to be most interesting."

Silently marvelling how this unguessably old, yet never dying, genius managed to catch the light waves of the time 25,000 and reflect them back on his own screen in 30,000, the four of us sat spell-bound. . . .

WITH amazing rapidity we hurtled towards the yellow planet of Ondon, straight down towards the invincible might of Zagribud, looking just as it had before our seemingly futile efforts at destruction with Frot's

sound projector—and straight down towards the roofs of that Jovian-teeming city. I caught hold of the arms of my gold chair tightly; a sensation of headlong falling was upon me. Then the apparatus slowed down, we passed through the solid roof, saw all the formations inside the metal work, and at last, after much searching, arrived in a familiar apartment where a solitary figure in dead black moved silently and efficiently.

"Jelfel!" I ejaculated involuntarily.

"Yes, and he took a little finding, too, not knowing the exact whereabouts of his laboratory," Valma commented. "Watch again, my friends."

The focus of the almost uncanny space-television apparatus changed a trifle and we beheld a three-quarter length picture of Jelfel, entirely free from all tremor, standing before an apparatus similar to our own. He was gazing intently into a screen, upon which was a view of our own superimposed Earth of 25,000! This reflecting and sub-reflecting through the void was almost more than I could grasp. . . .

If the cold smile on Jelfel's face was any guide, he was feeling particularly well pleased with himself. In fact there was an expression about his mouth, a suggestion of merciless hardness, that inwardly troubled me. I had seen that expression before, and it always implied he knew of something which others did not. Yet what could he know? For once in his life of power and ruthlessness he had been utterly fooled. . . .

Then presently he wandered away from our view towards a mass of machinery. I heard a noise in the almost dead silence, the snapping of a switch. The view faded, became transparent, and then vanished. Lights came up in the projection chamber.

"One day, maybe, I will find a way to link sound with this unique machine," Valma said thoughtfully; then becoming practical again. "Well, now we know how Jelfel sees things. We have him completely trapped, and his time deflecting has obviously proved useless, otherwise we would not be in 30,000 at this moment. . . . The next thing to do is to marshal together our army of space-time machines and then follow the slowly receding Earth image, timed by my instruments, through space to Ondon."

"In that case, Valma, I suppose we shall have to go to 25,000 to make our start?" I enquired.

"We could start from here and alter our time-machinery to go back—but it would simplify matters to start right away from 25,000. Yes, Commandant, we will do that."

Later in the day—I use the word purely for convenience—we arrived in 25,000, and, having been there so much during the time-juggling period, we felt entirely familiar with our surroundings. The sky, we found, was exactly as we had seen it in Valma's televisor. . . .

Immediately Valma led our little party to the quarters of Luvstrom, Minister of War for 25,000, and for two and a half hours we were in conference—planning, plotting, arranging, suggesting—until at last we had before us, mentally, a detailed plan of our *modus operandi*. It was decided that at the final word from Valma forty space-time machines would set off into space from 25,000, behind the three-dimensional false Earth, and launch the great attack for Zagribud's final extermination. I was to head one fleet of twelve ships, Valma another twelve, and Luvstrom sixteen. . . . So it was decided. There remained nothing more to do but wait, until the



timing device used by Valma revealed that, in relation to Jelfel's force, the image of Earth was sufficiently far away to permit of us going behind it. . . .

The long awaited day came at last. Valma rejoined Elna, Ronnit, Frot and myself from 80,000—for we had stayed behind to await his instructions and supervise the equipping of the space fleet. His announcement was that Earth was now one quarter of the way to Ondon—the image was, at least. To us, the vision in the sky of 25,000 was a singularly remarkable one. We beheld an exact, seemingly solid counterpart of Earth itself, daily becoming smaller. As, by the same proportion, the view would become larger from Jelfel's end, the real Earth was never seen beneath, even the movement in the natural orbit having been carefully checked. . . .

"Yes," Valma remarked, glancing up at the false Earth, "it only shows what a perfect liar light can be when you know how to turn it to account. Have you got everything ready, Lee?"

"Everything," I assented. "We are all set for departure."

"Then we depart right away," he decided firmly, and set off forthwith for the space-time machine grounds, arriving at length on the vast area where lay the forty glittering prospective destroyers of Zagribud.

OUR actual departure was without ceremony or excitement. In 25,000 either war or peace were treated with equal lack of emotion. Calm detachment was the keynote of that advanced era. To bid a man "good cheer" when he set off to exterminate a planet would have been marked as a token of slight lunacy and a strong case for a brain expert to be summoned, because the individual con-

cerned was revealing a "*primordial trait*." Again, as I stepped into our particular time-space machine, I wondered if the discovery of perfect time travel had improved man or spoilt him. As I write now, at the end of my adventures, I find I love 2004, my own Age, more than any other. But I fall into the evil of digression. . . .

With Valma beside me at the controls, and Ronnit and Frot on the look-out post, I at least had able assistants. Elna, who was with us, merely watched with deep interest. Leading the fleet I swept into the upper air, through Earth's brief atmospheric belt, and then lunged into the depths of space itself, heading straight for the false Earth directly ahead. At our speed we rapidly began to overtake it.

"Slower—slower!" Valma counselled. "Don't go through the image, or you may be sure Jelfel will guess the idea."

"But, Valma, at this pace—" I began. "Why, we'll be weeks crawling in the rear of this image! You forgot that!"

He smiled enigmatically. "The Master of Science never forgets," he replied calmly. "I have considered that point. That is why we came in space-time machines. The period taken for the false Earth to approach reasonably near to Ondon is eight weeks. So, move forward eight weeks—and give instructions to the entire fleet to do likewise."

I turned aside to the radio intercommunicator and relayed his orders to the remainder of the ships. With a simultaneous movement, at my word, forty time levers moved over and forty switches again removed us from the universal time-line. I looked outside.

The deeps of space were unchanged—save for one thing. The mirage Earth had gone!

"The false Earth is now near Ondon, and hence out of our sight," Valma remarked in his steady voice. "It was necessary to come into space first, in order to still be in space eight weeks later. We have merely to follow a straight line from here and we will find the false Earth again, near enough to Ondon to permit of us coming from behind it to attack. Full speed ahead, Lee."

Immediately I pressed over the machinery switch of the Particle Disintegrators and our flagging rate began to rapidly pick up.

"Say," Lan Ronnit remarked, turning, "Jelfel said he was going to put humans in a state of suspended animation, whilst Earth crossed the void. What rotten luck for him if he's using all that power on an image!" He grinned at the thought.

"Undoubtedly he will be," Valma answered. "Still, that is his affair, not ours."

Rapidly we gathered the maximum momentum and hurtled through infinity with the speed of light, out beyond our own Solar system and into the space beyond. Immeasurable emptiness, bridged by man's brains and ingenuity!

About an hour and half later the false Earth began to appear in the void before us, whilst directly to the left of it was Ondon—and, on either side of Ondon, and now very much nearer to it, those two strange planets that I had observed from the planet itself, and which still lacked an explanation.

"Splendid! Splendid!" Valma breathed. "Steady, Lee. . ."

Manipulating the controls with the dexterity of long practice, I manoeuvred the ship until at last that mighty mass of projected image filled all the void before us—a world, and yet not

a world. An incredible paradox—a transparent solidity!

"Now for my penetrator," Valma said keenly, and switched on the instrument in question—actually a simplified form of his space-television, once again capable of passing through anything. The receptive beam passed through the image before us and revealed Ondon itself upon the screen, Zagribud lying still and somnolent, apparently, in the light of the yellow sun.

"Well, we've succeeded all right," Frot remarked with suppressed eagerness. "What do we do now? Open fire?"

"Of course," Valma answered grimly. He switched off his machine. "We can fight *through* this mighty screen if need be—just as an army fights behind a smoke-screen sometimes. Elna—Ronnit, man the heat-rays. You, Frot, make calculations on the positions of our beams and check up on results. You, Lee, stand by for orders at the controls."

Rapidly Valma gave his instructions to the entire fleet of ships behind us, and they spread out into fighting formation in such a manner that their deadly beams would not disrupt one another by crossing. When at last everything was to his satisfaction Valma turned to give the order to fire, but before the word could leave his lips he stood as though struck with sudden paralysis, staring through the window.

"Great heaven above!" he gasped out at last. "Look!"

Immediately we all crossed to the window, and to our dumbfounded amazement, from the far distant edge of the false Earth, there was appearing a veritable multitude of cigar shaped machines.

"Attackers—and from behind the

screen!" Frot shouted hoarsely. "Why didn't they come through the screen, I wonder?"

Even as Frot spoke the approaching army of space-ships suddenly began to bristle with deadly beams of force and destruction.

"Jelfel! He's tricked us!" I gasped out. Then suddenly I awoke to life. "Quickly, all of you, man the weapons. Attack! Fire!" I bawled into the space-communicator. . . .

## CHAPTER XIV

### THE INCREDIBLE OPERATION

**I**NSTANTLY our defensive weapons came into being, but to my horror I beheld, almost from the first, that we were hopelessly outnumbered—not only in the matter of ships but in the efficiency of our weapons. Valma's heat-beams certainly accounted for four of the opposing fliers in the first two minutes, but that was the only ascendancy we had. Immediately afterwards the void became a mass of whirling vortices of light and glittering, darting space-ships. . . .

Clutching my controls, I had every ounce of my skill thrown to the test in dodging the rays that sought to disrupt us into powder. With dazed eyes I beheld space-ship after space-ship burst into blinding effulgences of light, saw broken pieces floating aimlessly about in the abyss with void-frozen bodies drifting likewise, chained by the slight gravity of the shattered space-ships—but the whole mass slowly gathering speed in the downward movement that betokened Ondon's gravitational pull.

"Those beams of theirs!" Valma panted. "They're of a frequency I never heard of! You were right, Lee; I may be the cleverest man on Earth, but this creature Jelfel is far above

me in his knowledge. What a brain the man's got! Incredible knowledge! Those beams just bring instantaneous disruption—but no melting, nothing. Pouf! And the ship is gone. Blasting of atoms. . . . But *how* did Jelfel know that—Look out, Lee!" I swung my control lever round and by a fraction of an inch we missed the full sweep of one of the rays.

"I'll get that beauty!" Lan Ronnit muttered, tight-lipped and grim, watching the ray amongst its fellows, and the ship that possessed it. "Watch!" and he set himself mercilessly before his heat-beam machine.

As our vessel swung round and came into the full view of that particularly persistent space-ship, Ronnit sighted it across the hair-line divider of his apparatus. Then, a faint but unholy smile on his face, he depressed the force button to its fullest limit. There was a faint ray in the blackness of space, then the ship in question turned blue-white, swung round in a giddy semi-circle, and went reeling away, uncontrolled, into the infinite gulf. I presumed the heat had burned the pilots to death—sealed them in a coffin of white-hot metal. Watching the ship I saw it crumble into boiling and dripping destruction a few moments later. Perspiration began to run down my face with the awful intensity of the moment.

Ronnit rubbed his hands with curious calmness. "That got 'em, Lee. Now let's try a few more!"

"It's no good!" I groaned at last. "We can't do anything against all this lot! We are done for, Valma!"

"At least we'll try and do what we came for," he answered curtly. "Remember, it is written in time that we shall succeed. Go through this false Earth and we'll attack Zagribud itself. Hurry, man. . . ."

Dazed somewhat with the circling beams, I performed an erratic and crazy revolution in space, swung round, and held my breath whilst we hurtled towards the apparently solid mass of the false Earth. As we gathered momentum, my brow clouded. This mythical Earth was undoubtedly a marvellous formation—so skilful, so incredibly life-like. It almost looked. . . .

"Wait!" Valma called suddenly. "Wait. . . . I have just recollected—the opposing ships came *round* this screen, not through it. It must be the Earth. Turn aside! Anything! Great God, what's gone wrong?"

"I can't stop now!" I panted, tearing at my controls. "At least, I don't think so. I—" I wrenched the steering propulsor around with dangerous force. We swung around broadside and hurtled in somersaults through the void. Then abruptly there came a deep roaring from outside—Atmosphere! Then this supposed image was indeed the Earth itself! With reeling brain I saw the globe of 25,000 A.D. somewhere over to the left of us, from the angle we were at.

We pitched and twirled right and left, all thought of our other companions in space forgotten.

"To the right! To the right!" Valma thundered, perspiration wet on his face.

Again we twisted, and shot round at almost inconceivable angles. I saw the loftiest tower in New York hurtling to meet us—a second later and it was far behind, missed by the barest fraction of an inch. Try as I would I could not steady the persistent lurching of our space-time machine. . . .

**W**E quaked and vibrated our way out into the void again at last—a tiny stretch of void between Earth

and Ondon. Indeed, all Ondon lay before us. Once in the grip of the sinister influences housed upon that planet, and the struggle would be useless. With complete helplessness we were dragged down to the borders of Zagribud itself, and came to rest at last, fairly quietly, upon the great magnet itself.

Mechanically I switched off our engines and turned. In utter dismay we looked at each other.

"Incredible!" Valma muttered at last. "It proves, Lee, that records are not to be relied on. There is no mention in past time of this happening; the record of the incident either was never made or else was lost. Beyond doubt, amazing though it is, Jelfel has succeeded after all in taking the genuine Earth instead of the false one. I cannot understand—"

"You never will," a laconic voice commented, and turning we beheld Elnek Jelfel himself in the doorway of our machine. The sealed door itself had vanished!

"You pardon the intrusion, I hope?" Jelfel asked pleasantly, stepping forward. "Doors are really the most childish things to remove when you carry a force-ray capable of transforming solid metal into pure vapor. That was why you heard nothing—just soundless disintegration. A new discovery—remarkably effective. . . . Well, Commandant, again our paths have crossed—if I may resort to the melodramatic! Entirely your own fault, you know. Ah, Miss Folson, my deepest respects. . . ." He bowed cynically. "And you, Valma, whose calculations did not quite equal my own. I am indeed having much attention in my humble efforts."

"Cut all this out, Jelfel!" I snapped, going close to him. "What have you done? How have you done it? The

Earthlings—the Earth itself—”

“Precisely, the Earth itself,” he conceded coldly. “Since you chose to absent yourselves from attack for eight weeks, whilst you travelled through time, you have only yourselves to blame. I was waiting for that move, in fact. In that time I discovered your trickery, by the sheerest chance! Whilst observing what I took to be Earth, I saw a comet pass clean *through* it and emerge on the other side. I knew at once that that could not be a solid world. I set to work with my brains, concentrated, and at last was able, as I have done before, to read your brain, Commandant. Really, you have a most malleable series of brain frequencies, I assure you. . . . After that, the rest was easy. I threw a power area through space, deflected it so that it struck 30,000, and destroyed your false Earth and machinery for spoiling the influence of my Time Band Compressor. . . .

“Then, I had merely to again move civilization forward as before, set my magnets to work, and draw the real Earth here whilst you were absent in time. Perfectly simple. . . . You have a stray and entirely unimportant comet to thank for your downfall, otherwise, I confess I should never have known the difference. It was simple to compute from your brains how long you would be absent, Commandant, so the arrangement of my space-fleet was singularly easy. Frankly, I never expected you would live through the battle, but here you are—and I see there are seven other space-ships surviving out of the fleet. Too bad, my friends—really it is! And, by the way, Valma was quite correct when he explained to you how I deluded your poor simple minds into thinking you had destroyed Zagribud. . . .”

“Jelfel, it is written in Time that

you shall fail!” Valma said grimly.

The ruthless Jovian smiled faintly. “Surely, Valma, a man of your high intelligence—so called—does not rely on faulty records?” he asked sardonically. “If I were to do that I could never accomplish anything for fear of what is written! But we have wasted enough time here. Come with me!”

We followed him from the magnet floor, through the doorway in the walls, and then for a space were held in sheer amazement by the sight before us. Filling all heaven was Earth itself, semi-inverted to our view, the city of New York 25,000 plainly distinguishable. Upon a great stretch of clear ground, clear of the magnet, lay massive space-machines. Even as we watched some rose into the air and vanished towards the nearby Earth; others came out of invisibility and landed, disgorging parties of stocky Jovians, pushing upon a conveyance of some kind a number of inanimate Earthlings.

“What—what is all this?” Lan Ronnit gasped.

“Earthlings were placed in a state of suspended animation during the transit through space,” Jelfel answered quietly. “I told you that before. . . . Of course, I am afraid the transit has killed all Earthly vegetation, and so forth, but that need not be a great trouble. I can soon replace it; indeed the buried spores themselves, with warmth again, will burst into life. The frozen seas will thaw—Yes, Earth, when she returns to her normal place in the cosmos again, will be as fair a world as ever.”

“This means that you’ve wrecked Mars, Venus, and Mercury as well!” Frot snapped out suddenly. “You— you celestial butcher. The shifting of Earth from its orbit must have—”



"It has not made the least difference to your Solar System," Jelfel answered with supreme calmness. "I only want Earth. Mars is barren in this period, Venus is composed of worm-like objects; Mercury is naught but a blistered sepulchre. Earth's motion to Ondon has been counteracted by beams of force upon the neighboring planets, which have held them steady, for of course, when my operations are complete, I intend to return Earth to its rightful place in the void, and my fellows and I will go with it—in Earthly bodies; That is why I have kept a clear space in the void to return your—or rather *our*—planet to. . . . I hope you notice I do not destroy worlds unless I need to?" he concluded drily.

"I don't pretend to understand you, Jelfel," I said grimly. "You spare Mars, Venus, and Mercury—keep them safe—which is a decent thing to do. Yet you murder Earthlings as though they're flies. You're a mystery to me!"

"True, I have moments of restraint," he replied coolly. "Further, I am not murdering Earthlings—that would defeat my own ends."

"At the rate Earth has travelled through the void, it's a wonder it hasn't collapsed into pieces," Frot remarked thoughtfully.

"Pressure on all sides has prevented it," Jelfel replied curtly. "In fact, the atmosphere of Earth is now so saturated with my different energies and magnetisms that even if by some remote chance Earth were to fall back to its normal position in space, I doubt if anything unusual would happen. Earthlings could continue to survive, I am sure. . . . But come at once. I do not propose to stand here giving explanations. Follow me!"

We followed him perforce to the

mass of Zagribud, close at hand. I wondered at first why he adopted so ancient a method as walking, but presently the subtlety of the idea became apparent to me. As we went we caught up with the unconscious Earthlings lying upon the square, many-wheeled conveyances. A Jovian stood on the back of these machines and guided them across the rough ground. Men and women, even children, lay in utter somnolence, all unaware of the grim fate that was shortly destined to overtake them unless I could by some miracle prevent it.

Everywhere I looked I beheld the same evidences of approaching disaster for a vast number of the human race—and even those that escaped would be slaves of the Jovians! And yet. . . . There was no mention in Earthly history of Jovian control over the world. I took heart a little at that remembrance. At least it was a crumb of consolation.

ONCE in the precincts of Zagribud itself, I gained for the first time, an idea of its real power and might. Jovians came and went with fixed purpose in the ground pedestrian ways, queer motor machines shot up and down special vehicle tracks, amazingly swift air machines skimmed the tops of the almost immeasurably lofty buildings. And in the center of the city reposed one gigantic tower, which I had noticed before, towering to a height of close on two thousand five hundred feet. I wondered to what depth its foundations were sunk. Jelfel saw my gaze directed towards it, and paused, ready again to reveal that queer streak in his complex nature—explanation of the unexplained.

"The Cosmos Tower," he remarked. "From there I take all my astronomical observations. It also contains, just

below the summit, what I call my Cosmic Detector—a very useful instrument for registering if anything of danger is approaching from the void which is liable to threaten the security of Ondon. You must see it some time. . . . Now, we will continue. . . .”

We proceeded on our way, and as I went I sensed the incredible powers and scientific knowledge of the race of Zagribud, dwarfing anything ever attained in Earth's entire life history. This set me wondering. What was the *cause* of such amazing knowledge? Why was the Jovian race so wonderfully clever? It seemed that the theory that cleverness merely is the outcome of years of knowledge was at nought here. No, there was something different in the make-up of a Jovian brain to cause it—that was all. . . .

Reaching Jelfel's headquarters, his instrument rooms, we sat down at his behest and for a while he performed his usual action of surveying us before speaking. I am inclined to think he always did this to weigh up our thoughts before giving voice to his own.

“Not so very long ago, Commandant, you effected an audacious rescue of some five hundred Earthlings—or nearly that number—from my surgical laboratories,” he commented softly. “At that time Rath Granod was in control; had I been there you would never have succeeded. My late Supreme Master knew nothing of your ingenuity. . . . This time, you will not perform such a feat. Even you will find it difficult to save anybody this time—everything is against you. . . . Since the fates have been kind enough to bring you all back to me again after my effort to destroy you in the sun, I will keep to my original plan and make you my first Earthly subjects.

. . . I have always admired your body, Commandant—so powerful, so earthly! Much better than this cramped, Jovian one of mine with its artificial integuments. Have you ever stopped to think what is going to happen to your brains, my friend?”

“You said you were going to pot them, or something,” I returned curtly.

“Yes, I said that—but I also said a better plan might occur to me. One has done so. Your brains will be transferred to Jovian bodies—yours to mine, and mine to yours! Is that clear?”

“You—you inhuman monster!” Elna shouted hoarsely, her gray eyes wide in horror.

“I can hardly be anything else but inhuman, since I am not earthly, my dear lady,” Jelfel replied, and dealt her a merciless glance of his green eyes. “I shall not forget you, Miss Folsom, either! You will become a Jovian servant on Earth—my particular servant, and will have to tolerate a Jovian body until the end of your days! You, Frot—you, Valma; you Ronnit! None of you shall escape! Curse you all. . . .” Jelfel paused and then shrugged slightly. “At times, emotions of a past time are liable to overcome my innate gentility,” he commented drily. “During the operation, Commandant, I will have your face altered to be normally earthly; frankly your Jovian appearance does not appeal to me, since I am to have your body!” He clenched his thin, artificial hand. “I have two thousand subjects awaiting treatment in four hours!” he said bitterly. “And you four shall start the brain transference! Now think your way out of that, you fools!”

He turned and touched a button at his elbow. Four heavily armed Jov-

ians entered, seized us, and without a word escorted us to underground dungeons, contiguous to the great, surgical laboratories. Within the crowded space we found countless other unfortunates, revived from the suspended animation, lying upon the floor or propped against the walls. It was a far more noisome place than the previous cage we had encountered, and indeed much darker. . . . The five of us were bundled over to a far corner, and there took counsel amongst ourselves.

"This is the end of the road, all right," Lan Ronnit commented bitterly. "If this is the best effort of the cleverest man on Earth, Valma, I'm not interested!"

"I did my best," Valma replied sadly. "Unhappily I have failed. Why? Because Elnak Jelfel is the cleverer man. Which proves he was right in what he once said to you, Lee. The Age of Problems is, *was*, and *will be*, the greatest Intellectual Cycle in Earthly history. The various tenses cover it from every aspect of Time, I think," he added with a faint smile.

"It is glaringly obvious that no amount of trickery can get us out of this," Elna said very quietly. "I know when I'm beaten. . ." She sank her chin on her chest, not dejectedly but thoughtfully. She was made of stronger stuff than a weakling. . .

SO the hours dragged slowly by, hours crammed with suspense. I tried everything I could think of to outwit Jelfel, but it was useless. The guards paced rhythmically outside the dungeon door; from the dungeon itself there was no escape. Neither had we any weapons. . . .

I have little recollection of how the time really passed; my really clear recollection was of being roughly

hauled to my feet along with my companions and seven other Earthlings. Including Elna, there were four women and seven men in the party, counting in myself.

We were taken from our prison and marched down a short passage of metal, then into the already familiar laboratory replete with its super-surgical devices. . . . For myself I did not fear the operation itself; I had already tested Ondonian surgery, and knew it to be a science passing all Earthly skill. . . It was the fate of Earth itself that troubled me. For the life of me I could not understand why no record lay in Time of Jelfel's conquest of Earth, for there was certainly no escape this time. . .

Then suddenly my meditations were rudely interrupted by my coming face to face with Jelfel himself. He permitted that icy smile of his to flit across his hard face.

"Good evening, Commandant," he said pleasantly. "And pray accept my regrets for having called you 'Commander' until recently. I have only just discovered—a little while ago—your elevation to the rank of Commandant. Commander of Commanders."

"I received that honour four years ago, for overcoming you!" I retorted.

"Ah, yes—the fight that failed," he commented lightly. "You were quite brainy at that time. Commandant; even brought Miss Folson back to life after I killed her. I must thank you for that, though; that very fact made it possible for me to return to Earth again through her. Naturally, I soon discovered she was alive again. . . But now, I think, we are coming to the end of this little interplanetary duel, interesting indeed though it has been. You observe. . ." With a wave of his arm he motioned to eleven broad

tables, about two feet high, drawn up under powerful radium lamps. Upon each of the ten of the tables reposed a Jovian, obviously unconscious. The table nearest us was empty.

"For you and me, Commandant," Jelfel explained smoothly, indicating it. "A very high honour for you, I assure you! The next four Jovians are female, the remaining seven male. Miss Folson, would you be so good as to lie down on the second table,—there, beside your future brain carrier!"

"I—I— Never!" Elna shouted hoarsely, clenching her fists desperately.

"Look here, Jelfel—" I began dangerously.

"I would warn you, Lee, that any false move will result in your instant destruction!" Jelfel snapped venomously, all the veneer of culture abruptly vanishing and the real cruelty of his make-up becoming obvious. "I require your body, so don't jeopardise it! Elna Folson, do as I command you!" His green eyes blazed at her with terrific power; she seemed to sway before their intensity, but, as Jelfel had found before, her mind was a strong one.

"I'll—never—obey," she answered dully; but it was obvious his enormous mental force was slowly overcoming her. To my surprise, however, he did not proceed further with his hypnosis. Abruptly he turned towards me, suave and cultured again.

"If I hypnotise Miss Folson into doing my bidding her brain may be awkward to manage during the operation," he explained smoothly. "I have appealed to her innate graciousness, and she will not respond. The only alternative is force!" He made a quick motion and in response two surgeons from an army of twenty-two, grouped

behind us in readiness, came forward. In another moment they had seized Elna in their tentaculate hands, raised her rapidly through the air, and deposited her on the second table beside the unconscious Jovian. She struggled mightily, but futilely. . . . An anaesthetic cylinder hissed, and she presently relaxed limply and became still.

"Such methods pain me with the gentler sex, but sometimes it is necessary," Jelfel remarked. "Now, Commandant, get on that table, please."

"I'll see you in—" I began furiously.

"Do as I say!" he thundered, and, realizing the pitiful futility of defying him, I slowly obeyed—climbed on to the low table and lay down. A moment passed then he was beside me. "I will see you later, Commandant," he said coldly—and that was the last thing I remembered, save for the hiss of the anaesthetic. . . .

The brain operation must have been completely painless, for I experienced nothing but peace during the transference. I seemed, as on that previous operation to my face, to awake almost immediately afterwards. There was no trace of headache, or weakness. Only an odd, unaccustomed stiffness.

"Better, Commandant?"

I looked up at that with a start, only to start again with extreme violence. Before me, it appeared, stood myself! In my T.L.C. uniform! My face was again Earthly, and, although not resembling the face I had been born with, was passably terrestrial for all that. This vision automatically forced me to look down at myself. . . . Black clothing! Stiff limbs! I felt my hand—Artificial! My leg also. . . . With clumsy effort I got down to the floor.

"You've—you've done it!" I shouted hoarsely; then paused amazed at the sudden strain on the artificial vocal chords with which this amazing

body was equipped. I did not wonder, at that moment, that Jelfel was glad to be rid of it.

"Of course—I always succeed," Jelfel answered, in my own voice, flavoured all the same with his own biting intonations. "There you have Miss Folson—"

I swung round to behold Elna slowly getting to her feet. She looked at me without a trace of recognition, then turned to Jelfel. Queer noises emerged from her mouth.

"These transferred Jovians will have to be taught Earthly language, and the use of Earthly vocal chords," Jelfel commented. "You, Commandant, are looking at the wrong person. The Jovian behind us is now Miss Folson!"

My brain reeled as I looked at the squat Jovian seated on the operating table.

"Elna! Elna!" I shouted hoarsely. "In heavens' name, Jelfel, what have you done?"

He smiled cynically. "Surely no explanations are necessary? The body of Elna is now the carrier of the brain of my closest female attendant. Elna's brains are therefore in the Jovian. You have a saying on Earth, Commandant, that exchange is no robbery. This is a literal interpretation of the phrase. I am afraid Miss Folson will find it a trifle difficult to converse with you, having Jovian vocal chords and no knowledge of the language. She will, however, understand your voice quite well, having still her own mind. . . . At last I have gained that which I have so long sought!"

I could only stare, dazedly and blankly, overwhelmed by the knowledge of this super-genius's complete success. Little by little the truth came home to all of us—we were possessors of Jovian bodies. Anton Frot, know-

ing the Jovian language, was the only one who could speak to me in the Jovian tongue. Valma, Ronnit, and Elna were mute; could only signal affirmative or negative answers by head movements. . . .

"You will stand by for further orders," Jelfel said presently. "I now have my particular advisers by me, in Earthly bodies, ready for the great Conquest. The others have yet to be attended to. In the interval, now that I have gained my end, you will be treated with relative freedom and will have every comfort until I need you. . . ."

He made a signal to his guards and we were taken with the unfortunate "transferred" Earthlings from the great chamber. . . .

## CHAPTER XV.

### ASCENDANCY

THE passing days of hopelessness had only one bright point. We were all allowed the freedom of the great city of Zagribud. Jelfel, as he had said, had accomplished his purpose, and knew we were now powerless to stop him. Day by day fresh Earthlings were transported from the now stationary Earth in the Ondonian heavens, and the inhuman butchery went on. Helpless, we five looked on, metaphorically chained hand and foot.

Then, as the time went on in suspense and idleness, I became aware of strange and unaccountable changes coming over me. I found myself understanding a lot of things that had puzzled me before! In some indefinable sense I was actually becoming much cleverer! Once the condition commenced, this heightened knowledge increased day by day, until finally, puzzled, I confided in Frot—



or rather in the Jovian who carried his brain.

"There is only one explanation," he said, in Jovian. "You are now reacting to the brain transference, and something is happening which Jelfel never reckoned with. The power of a brain always relies upon the quality of the blood-stream that feeds it. Thus, at last, I begin to see why Jelfel and his fellow Jovians are so brilliantly clever. The air of both Jupiter and Ondon is highly oxygenated—creates a blood stream different from ours, which results in intellectual power of almost uncanny perfection. The actual brains, I imagine, are no different from ours, but they are treated to a better blood-stream, which results in knowledge which Earth can never approach. . . But, here is the point! You now possess the body that was formerly owned by the most brilliant man in Jovian history; there is nothing to stop your brain finally becoming like his, fed, as it is, by that perfect blood stream. We others will get cleverer also—I myself feel as you do already—but we will never approach your perfection, since, in some way, Jelfel's body seems superior in some indefinable way. . ."

"Good heavens!" I breathed. "Then—then the very thing that Jelfel has looked for, fought for, even murdered for, is going to prove his undoing! If I am increasing in knowledge, it stands to logic that he and his contemporaries, who possess *our* bodies, will decrease with our earthly blood-stream!"

"Exactly," Frot assented keenly. "Lee, Jelfel is going to destroy himself in his finish. . . However, lie low for a while and we'll watch what transpires."

Communications by written word to Valma, Elma and Ronnit confirmed

our hopes. All of us were becoming rapidly cleverer—were approaching that glorious perfection of knowledge that formerly had been the birthright of a Jovian. The possibilities opened up before me like a shining vista. . .

From then on we all practiced our mentalities as much as possible, exerting them to respond to new problems, and each time we found ourselves the masters! With remarkable rapidity I found myself ascending to the level of Jelfel himself. I wondered how he was faring.

We found out how he was faring very shortly afterwards. . .

Towards the close of one of the days we chanced to find ourselves in the vicinity of the power-house for the magnet, the one medium that held Earth near Ondon. The familiar mist of the evening enveloped everything, when suddenly there came from its midst the voice of Jelfel—or of rather myself, since he had my body.

"You fool! You say the Retractor is faulty, has been hastily repaired after that short circuit—that it isn't radiating power as it should? Well, repair it! Why drag me here for that?"

"But, Master, the repairs made before are not good enough," a Jovian voice replied. "Only you understand how to make a thorough overhaul of the defect. . . Since a guard fell into this machinery, it has never been properly right—"

"Very well, I will repair it—but your work for me is done!"

WE heard the sound of footsteps as Jelfel entered the building, then, with infinite caution the five of us moved to the doorway and peered within. The Retractor was, fortunately, fairly close to the door—it was indeed the machinery composed of

glowing wires into which I had hurled that ill-fated guard in the struggle to obtain the power-house. Jelfel paced about thoughtfully for a while, stroking his chin. I found again enormous difficulty at crediting it was my body he was using. . . . At last he made a gesture of impatience.

"I cannot repair it tonight, Zal-Jafor. It requires thinking out. The energy is certainly escaping somewhere—somehow. I am bemused tonight."

"Bemused, Master!" the Jovian expostulated. He was actually a Jovian, by the way, possessing his own brain and body. "But, with every passing moment, due to the leak in power, which is becoming steadily worse, Earth is drifting further and further away from Ondon. You see, your magnetic machinery on Earth, which you remote-control, is getting stronger than this magnetic, due to pull from the Earth's sun. . . . Master, you have got to stop the leak, or lose the Earth!"

"Who repaired this Retractor?" Jelfel asked abruptly. "Or, I should say, who attempted to repair it?"

"Rof-Elsor—but then, he is not so brilliant as you, Your Serenity."

"And where is Rof-Elsor now? He might stop the trouble."

"Rof-Elsor, so far as I know, is somewhere on Earth," Zal-Jafor replied grimly. "No, Master, this is a task for you alone—"

"Well, I cannot do it now," Jelfel retorted. "I will come in the morning and go into the matter. In the meantime, try and locate Rof-Elsor. . . ."

"As you wish, Master."

We backed away into the friendly mist as Jelfel came striding out, to presently be swallowed up in the gloom.

"It's working!" Frot breathed.

"We're winning—and quite unintentionally! A few more days and Jelfel will be cornered! With his brain power decreasing, and ours on the increase, he'll not stand a chance. Come—a little planning is called for."

We turned to depart, then with the peculiar suddenness for which it was remarkable, the mist dispersed into the upper air, revealing to our eyes the amazing sight to which we had now become fairly well inured. . . . But tonight there was a change! The Earth was noticeably further away in the heavens. Although it filled nearly all the sky above us, the view was not as distinct as formerly. Already the leakage in the magnet was having its effect. . . .

"We've got to think things out as rapidly as possible," Frot remarked. "If Jelfel can't stop the Earth, it will slowly move back through the void, drawn by our sun, until it is drawn completely into the sun. At all events we must stop that—indeed we know we shall by Earth being in existence at all in later time! We can take it for granted that Jelfel will not repair his magnet; by tomorrow he'll be unable to compute how to do it—but that is not our point. We can let the Earth drift further and further away, and turn our attention to destroying all means of communication between it, save one. That one will be a time-space machine for ourselves to use the instant we need it. We can hide it somewhere; with his decreasing knowledge Jelfel won't be able to read our minds and discover its whereabouts. . . . Yes, for the moment we must concentrate on saving any more Earthlings from butchery, and force Jelfel to give them back their own bodies."

"I agree—but we don't want *our* own bodies back yet," I responded

quickly. "If we do that our brain power will commence to fail. Our bodies can wait awhile. . . ."

"Right enough—but we must help the others."

And this plan firmly fixed in our minds we turned our faces once more towards the brilliantly lighted enormities of Zagribud.

THE following day we had our plans laid. I myself was to carry out the most important part in this gradually improving battle with Jelfel. And for this part I removed the artificial integuments that made me Earthly in appearance and became, of course, an apparently natural Jovian. Attiring myself in clothes borrowed from Frot—for he of course possessed a normal Jovian's attire—I set forth for Jelfel's own headquarters in the heart of Zagribud, leaving my four companions in the little domicile that had been assigned to us for the time being. . . .

I felt enormously courageous as I made my way amongst the masses of Jovians in the pedestrian ways; my knowledge was equal to, and even superior, to theirs, since I owned the body of their Master. . . .

Entering the great edifice that I had learned was his headquarters, I made my way through the various passages until I reached his instrument rooms. Two armed guards barred my path.

"An urgent message for the Master," I said, using my vocal chords as well as possible to simulate a Jovian voice. They moved aside at that, to my relief, and I entered the great instrument room and closed the door tightly behind me. In the distance, before his countless switchboards, stood Jelfel in my body. I advanced slowly, and he turned to face.

"Well?" he demanded curtly, also speaking Jovian with difficulty with my Earthly voice. "What is it?"

"Elnek Jelfel, you have a lot to answer for!" I said grimly, in normal language. "Perhaps you have difficulty in recognizing me like this?"

"Ah, so it is the Commandant himself!" he said cynically. "Still pestering me, I observe. I shall have to hurry your transportation to Earth. Why have you risked your life coming here at all?"

"Just to have a chat," I returned steadily. "And also to use one or two of your very valuable instruments."

"Remarkable, Commandant!" He smiled coldly. "Anything else?"

I went closer. "Listen to me, Jelfel! I am gaining the upper hand—and you know it! You're not so clever as you were. You couldn't repair the magnet last night! Earth is slowly drifting away!"

"You know a lot," he answered slowly. "The magnet is certainly faulty, but I am going to repair it—"

"It's no good, Jelfel, you're losing ground—otherwise you'd stop that leakage *now*!" I intervened curtly. "Do you know *why* you're losing intelligence? Because your blood stream was the cause of your terrific mentality. I am now obtaining that benefit; you are becoming clogged—doltish!"

His expression changed; it was manifest the idea had not occurred to him before.

"Further, you're going to get worse!" I proceeded mercilessly. "I am going to get better. Your own villainy has proved your undoing!"

"I'll soon alter that!" he snapped out. "I will have my blood stream changed so as to be the same as yours!"

I smiled twistedly. "Yes? How, Jelfel?"

"Why, I'll—" He hesitated, and I realized how much indeed the master-mind was collapsing. Formerly he would have instantly reeled off some amazing and practicable formula; this time he paused, shot a glance at me, and then pondered deeply.

"You can't conceive it—any more than I could have done in my own body!" I said grimly. "You've been an inhuman devil, Jelfel—taken advantage of those with less intellect than yourself—have maimed and terrorized the population of an entire planet. But you're going to start paying for it now. Little by little. . . . Until at last will come—annihilation!"

"Don't be a fool!" he retorted bitterly. "I will show you how Jelfel treats such as you—"

"Even your personality is changing," I proceeded inexorably. "You're half Jelfel—and half somebody else—maybe me. Something half-Jovian and half-Earthly. An interesting species—a cosmic half-breed! Your manner is different; you've lost that persuasive brilliance, your powers of mass-hypnosis—"

"You—" he exploded, taunted beyond endurance, and whipped out my own ray gun from his belt.

"Drop that!" I commanded fiercely, staring immovably into his eyes. "*Drop it!*"

But my mind was not then strong enough for that. He pressed the button on the ray gun, but instantly one of my two sets of right hands shot up and whirled the instrument from his grip. With one rush I bore him to the floor; then forced him up again using the ray-gun to my own advantage.

"You've evidently forgotten that that ray-gun couldn't hurt me in any case," I said sarcastically. "Earthly ray-guns are useless on Jovian matter, you know. You were going to solve

that little problem—evidently something else that's too much for you in your present condition. Now do exactly as I tell you; I don't want to destroy my own body if I can help it—I shall want it back later. Issue orders immediately for the restoration of earthly brains to their natural bodies. Everybody—save me. I am staying this way for a while."

"You think you can do this?" he demanded savagely.

"I know I can," I returned calmly. "Hurry!"

He hesitated again, glanced at the ray-gun, then turned to an instrument on the wall.

"Not that way!" I intervened curtly. "You're coming with me—to the surgical laboratories. It's a safer way. And remember the ray gun. Don't dare make signals—"

With a sudden mighty backward sweep of his arm, however, he knocked the ray-gun from my tentaculate hand and hurled himself forward. In his anxiety to overcome me, however, he was a trifle too hasty. He stumbled over my smaller body, tripped forward, and, being still unable to fully calculate my five-foot-ten length, struck his forehead a stunning blow on the instrument board behind me. He reeled, clutching his brow, and in that moment I seized my chance. I gave him one huge shove and sent him stumbling dazedly into a recess. One clean movement and I had slammed the door upon him, ramming the bolts into position. A dull thud from within a moment afterwards convinced me that he had relapsed into unconsciousness from the blow.

At top speed I raced into the adjoining apartment and gazed hungrily around the instrument jammed walls. At last I beheld that which I sought and fully understood—the marvellous

Emanation Detector, which by a process of vibrations and calculation recorded on a screen any person or any object within a distance of twelve miles."

Rapidly I calculated. Elna's emanation number I knew, from past experience, was 1016. Immediately I swung round the pointer to the required number, and adjusted the switches. Presently the screen blurred, then there came into clear view the Jovian female who was occupying Elna's body. I beheld her actually at the space-ship grounds, talking apparently to another "transferred" Earthling, preparatory to entering a space ship. . . . Another few minutes and my task would be extremely difficult—if she set forth into space.

I SEARCHED around and beheld the almost familiar sixth-dimensional Rotator. A snapping of switches and altering of frequency dials—I apprehended the device almost as clearly as Jelfel himself with my improved mentality—and that amazing movable dimension was pivoted in space, and calculated to exactly strike the spot where the bogus Elna was standing. Came a thud in the instrument room, and there she stood before me.

"What does this mean?" Elna's voice demanded—but it had none of her natural sweetness of tone. Obviously the Jovian female had been taught the Earthly language.

"You'll soon find out!" I responded tersely, and then I had a great inner struggle with myself to convince my mind that I was not actually hurting Elna herself in that which followed. I seized her by the shoulders, threw her with a crash to the floor, then rapidly gagged her and bound her to the massive pillars of the Rotator.

"You'll do like that for a while!" I barked. "You're going to give that body back to its rightful owner. . . ."

I then set to work to calculate the correct emanations of Frot, Ronnit and Valma. Satisfied at last I set to work again with the Emanation Detector, and was fortunate in finding that none of the three had left Ondon. The sixth-dimensional Rotator soon brought them into the laboratory, one by one, and as fast as they appeared I overpowered them.

So far matters had gone fairly smoothly. Jelfel presumably was still unconscious, for no sounds proceeded from the locked recess in the adjoining apartment. Certainly the blow had been violent enough to occasion such a condition. . . .

I next turned my attention to the radio apparatus—or rather television machine—and presently tuned in my own particular domicile in Zagribud. (All domiciles in the city were equipped with both transmitting and receiving apparatus).

Presently the Jovian face of Frot appeared on the screen before me.

"Frot, I've succeeded in getting back all the rightful bodies," I said quickly. "All of you go straight to the surgical laboratories; tell the surgeons Jelfel has sent you there. Ill fix the rest. Be with you in about ten minutes."

"Right—I'll attend to it," Frot replied in Jovian, and switched off.

The remainder of the time I spent in arranging my four captives in a neat "bundle," directly in the focus of the Sixth dimensional Rotator—and also in calculating the distance and angle of the surgeries. Then, glancing over my captives I pressed the automatic button. Once more that dizzy sensation of headlong falling through space, and the vision of the great



laboratories materialized before my eyes. So much for Jovian mathematics; I began to realize how rapidly I was equalling Jelfel himself in intelligence. . . .

Four Jovian surgeons advanced in amazement as I appeared and looked down interrogatively at the bodies on the floor. Behind me, I noticed my four comrades, anxiously waiting.

"Orders from Elnek Jelfel," I curtly said in Jovian. "Transfer these bodies back to their rightful owners—immediately!"

"You cannot give us orders in that fashion. Jelfel himself must speak," said the foremost surgeon: a remark which I had fully expected and the answer to which was cut and dried.

"Whom else but the super-intelligent Master could project these four bodies, and myself, here?" I demanded. "I have been given those orders; it is your duty to obey. This operation is to be performed because the brains of the accursed Earthlings are becoming clever by reason of the change. Hurry—fools!"

"Truly, only His Serenity could gather these Earthlings together so rapidly and send them here *via* the Rotator," the surgeon said to his colleagues. "The matter is in order. We will proceed at once. . . ."

The main reason for them crediting my story was, I think, my own abstinence from being re-transferred to my own body. Otherwise I doubt if my ruse would have succeeded. Not for an instant did they suspect my identity; my complete detachment from the proceedings convinced them. Nor had they mentality high enough to read thoughts. . . . That had been Jelfel's particular prerogative. . . .

I watched intently whilst that brilliant brain transference took place—saw the neat, bloodless action of gold-

en drills, the glitter of electric knives and saws, and smelt the sweet-odorous ointment that welded the cuts into position with perfect, instantaneous smoothness. Then the restorative. The patients rose slowly from their tables.

"Sa-Sandy!" Elma breathed shakily, clutching my tentaculate hand. "I've—I've got my own body back for—"

"Hush! No names!" I said to her, sharply. "Thank God these fellows don't know the Earth language. . . ." I stopped and turned abruptly on the surgeons. "These Jovians, to whom their rightful bodies have been restored—see that they are imprisoned. His Serenity's orders!"

"Imprisoned?" the leading surgeon repeated in surprise.

"You dare to question the word of the Master?" I demanded, and at that he looked away.

"So be it," he assented solemnly.

"Quickly, out of here," I breathed. "They'll be asking me next why I'm using two languages. Come—there's a lot to be done yet."

We left as rapidly as possible; evidently the Jovian surgeons believed me to be a type of intermediary between Earthly and Jovian peoples, understanding both languages. Whatever it was, they didn't attempt to follow us. The fact, that I assumed the rôle of a guard, was the main reason for us passing unmolested to my domicile. Once inside, I shut the door and turned to my restored comrades.

"We're on the up-grade!" I said tensely. "What I propose doing, Frot, is to use your original plan and shatter Zagribud with sound waves. We have sound-projectors on the ships that survived the battle in space, and they should still be on the magnet where we left them. Valma made a fine job of those machines—"

"Truly," Valma assented. "I have turned them into perfect weapons, with no trace of dangerous recoil. Frot's idea and my perfecting processes have produced a masterpiece."

"I propose that we put a projector at the top of that great Tower in the city's center and rain vibration death on these devils," I went on grimly. "Jelfel is locked safely in a cupboard until I see fit to release him. I shan't harm him yet in case I lose my own body. That clear?"

"Yes—but what of the Earthlings who have been transferred into Jovians?" Frot asked.

"Unfortunately, we can't do anything about that as yet. It would take much too long. This is a case where the innocent are bound to suffer with the guilty. We can't discriminate, time is too precious. We cannot undo what has been done, but we most certainly can—and will—stop this butchery going any further. At nightfall we'll find a good time-space machine left, out of the few survivors that got here from the fight in the void, remove it to a place of safety ready for immediate departure, and then set to work to destroy the city. That is our plan. . . ."

## CHAPTER XVI

### IMPENDING DOOM

**A**T nightfall we set forth. I was rather puzzled by the continued silence of Jelfel since my attack upon him in the morning; I had come to learn that silence on his part was usually the forerunner of exceptional, and frequently deadly, action—but I took heart now in my obviously superior knowledge.

The five of us made our way through the usual Jovian crowds in our transit of Zagribud, until present-

ly we came to the comparatively quiet opening to the spaces beyond. It had passed the "mist-hour," and in the reflected light from the city and the glow from the slowly receding Earth we could distinctly behold the towering walls of the distant magnet, upon the floor of which there should be lying eight space-time ships—seven of them flight-worthy, for the door had been blown away from ours—unless Jelfel had had them moved. . . .

"The Earth certainly is rapidly receding," Frot said quietly, as we progressed. "Much more of the sky is visible now. This movement won't do the Earth much good, I'm afraid. Tidal waves and such-like—"

"But didn't Jelfel say his rays and beams had so saturated Earth's atmosphere that it would take no harm if by some chance it suddenly were returned to its normal position in space?" Elna asked.

"That's right—he did!" Ronnit exclaimed. "That means Earth is relatively safe, Lee."

"Yes; we hope so, anyway," I replied. "It looks as though the Earth-Ondon transit stunt has stopped for a while. See—the space-ship grounds are quiet."

"Only because the massacre is done for the day," said Valma gravely. "They don't work by night, you know. A few more hours, and we'll blow the entire fleet to atoms. That'll stop any more of it! . . . But here's the magnet."

We passed at that moment through the doorway in the wall and entered the floor of the magnet. In an instant we noticed the lack of attractive force as compared to our earlier experience. Beyond doubt the magnet had lost at least fifty per cent of its effectiveness.

"This is luck!" I breathed. "The lack of power will enable us to get our space-time machine into the air with-

out being dragged back." I looked about me. "Well, Jelfel doesn't seem to have thought it worth his while to destroy these ships; they're all here. We'll take the second one—ours is useless without an air-lock door. Come on."

"I cannot see why we don't hurl vibration at Zagribud from the ship instead of from the Tower," Frot remarked.

"For two reasons," I answered. "One because we want a steady ground and a clear outlook on all sides—such as only the Tower can give—and the other so that we can be sure of what we're hitting. If we tried it from this ship we might hit the wrong place, and accidentally destroy Jelfel, and incidentally my own body. I don't want that."

"Right enough. Lead on."

We entered the space-time machine and found it in comparative order. Obviously Jelfel had had more important problems to tax his gradually failing mind. Closing the door and moving the controls was but the work of a moment, and to our delight we rose into the air immediately, the power-effectiveness of the magnet too slight to hold us when our engines raced at full power. Once out of the direct line of the magnetism we did, of course, revert to normal powers of propulsion and ascension.

Seven minutes later we were floating high and silently about the massive city, then gently we dipped down and landed, with hardly a jar, upon the flat summit of the mighty two thousand five hundred foot Tower.

"There!" I said, switching off the engines. "We have two things here. Perfect and steady outlook, and a fine hiding place for the time-space machine, when it's needed. The last place Jelfel would think of looking in."

"Well thought out," Valma murmured.

Presently, with as much silence as we could manage in that dense air, we descended to the platform, carrying between us the sound-vibration projector with its ample lengths of power-cable. . . .

Then suddenly, amazingly, the platform was alive with Jovian guards! The first intimation I had of the fact was a scream from Elna, and swinging around, I beheld her in the clutch of a powerfully built Jovian, struggling with all her power. Even as I stared she swung dangerously near the low rail. Below was a sheer drop to certain death.

"Quickly—pile into them!" I shouted hoarsely. "It's a trap! Throw them overboard—no time for ceremony! This is Jelfel's doing, I suppose. . . ."

And the battle commenced immediately. . . .

Aided by my earthly knowledge of wrestling and gifted with the mighty strength and four sets of hands of a Jovian, I soon gave a dangerous account of myself. . . . The guard, who was bending Elna backwards over the rail, I suddenly seized by the shoulder, swung him around, and simultaneously planted my fists in his face. He tripped backwards, struggling to regain his equilibrium, but I inexorably followed up my advantage, clutched him round what was presumably his waist, and heaved with all my power. He rose ponderously from the ground, reeled sideways, then with an unearthly yell went toppling over the rail into the light-spotted abyss two thousand feet below. . . .

I swung around to meet the onward attack of another Jovian, then suddenly Frot let forth a terrific shout.

"Elna! Lee! For God's sake—"

I caught in my breath in horror,

dodged the onrushing guard, and hurled myself forward. Another guard had seized Elna and borne her to the floor. She, unable to save herself, tripped over the flexed cable of the sound projector and rolled to the edge of the platform. The Jovian, perforce, relaxed his grip, which only served to make matters worse. I had one last glimpse of Elna's face, utter despair in her eyes, then she screamed hoarsely and vanished over the platform edge! Immediately afterwards something thumped heavily against the platform rail, but I was too horror-stricken to notice it.

THE same guard came for me the instant he beheld my motionless attitude, but quite abruptly I saw his advance. Consumed with utter fury and fear I dealt him a bone-splintering blow on the jaw. He seemed to shoot backwards with the frightful impact; my whole double-fore-armed arm stung with the blow. In another instant he had struck the rail, failed to balance with his short body, and toppled helplessly into the void.

Instantly I was at the rail peering into the darkness; then I started violently. For the voice of Elna floated up to me.

"Sandy! Sandy! Down here!"

I strained my eyes, and at last beheld what had happened. In her fall Elna had made a last desperate clutch at the cable of the sound-projector, and was now swinging by her hands forty feet below the Tower summit. The thud I had heard had been caused by the projector itself slamming against the rail with the sudden pull. By a concession of Providence it had wedged itself and saved her from instant destruction. Even so, the cable was not meant to stand the strain of a heavy young woman's full weight.

"You attend to these remaining guards," I threw out, to the fiercely fighting Frot, Ronnit and Valma. "I'm going to help Elna. . ." Instantly I swung myself over the side of the platform, gripping the girder-work for all I was worth with my four hands. I went down cautiously perforce, hoping against hope that both the cable and Elna would be able to hold out long enough. As I went the cable before my eyes moved to-and-fro against the light from the Earth-ridden sky. A sense of giddiness sought to seize me at the awful abyss that yawned below in the hazy darkness. Instant death!

Then I again took a grip on myself and went downwards, but to my horror I now beheld the cable unravelling thread by thread beneath the strain! Stark horror swept in upon me. I struggled down faster, shouting encouragement, and once nearly missed my hold, to hang in shuddering horror to the main girders for an instant.

At last I came level with Elna, swinging like a pendulum in the void.

"Throw no strain on that cable!" I implored desperately. "Take it easy! Now, try and swing this way!"

"What am I to do?" her voice shouted. "I can't hang on much longer. Cramp in my hands—"

"Swing—towards me!" I counselled, admiration coming to me at her calm courage in her predicament. "Steady—now. . ." I watched, sick with fear lest the cable should snap and fling her to destruction.

With a skill that would have done credit to an old-world acrobat she began to impel her body backwards and forwards towards the Tower—a feat which would have been useless without me to catch her finally, otherwise she would undoubtedly have done it before now. I waited to seize her.

Then at last she came within reaching distance, and simultaneously the cable broke with a sharp snap. If ever I blessed a Jovian body, I blessed it then. For, holding on with two hands to the girders I was able to lean out with my two remaining sets of hands and clutched her as she jolted down into my grip. Another moment and I had dragged her up with superhuman strength and dumped her in a sitting position on the girder by my side.

She wiped perspiration from her forehead with the back of a red-raw hand—the cable had cut bloodless wheels into her flesh. “Phew! Sandy, I can think of better places than that to try out acrobatics!” she panted. “Look at my wrists—not a bit of skin left hardly. . . But thank God for that cable—and you!” She looked at me for a space, sat recovering her breath. Then she looked down into the abyss and shuddered. “Where do we go from here?”

I looked above and behind me. For the first time I noticed a small lighted building, with three walls only, in the centre of the girder work near the Tower top. From it, stairs led to the Tower platform.

“Better go that way,” I counselled, and helped her to her feet.

Carefully we struggled on our way along the massive cross-beams and lateral supports until at length we came within the three-sided division. It was quite brightly lighted with roof-bulbs. Upon one of the three walls reposed a large glass-faced dial, and in the centre of the floor a type of chart, resembling the Ondonian sky itself.

**F**OR a space I was deeply puzzled, then very gradually, as I studied the receding Earth reflecting on the shining surface of this floor chart, and

beheld various needles quivering on the glass-faced dial, it came to me what the apparatus was. Jelfel's Cosmic Detector, as he had called it—for charting the movements of celestial bodies and to warn him of the presence of unwanted occurrences in outer space.

Quietly I explained all this to Elna and she looked at me with a quizzical pair of gray eyes as I inspected the meters with deep interest, I comprehending most of them as I went, thanks to my Jovian mentality. . .

“Well, what do you make of it all, Sandy?” she asked at last.

I shrugged; then at a sudden commotion I was instantly on my guard. Three figures came clattering down the metal ladderway from above.

“Oh, it's you!” I exclaimed in relief, beholding Valma, Ronnit and Frot. “What has happened to the guards?”

“We laid them out between us; they're unconscious on the platform,” Frot replied. “Hallo! What's all this?” He looked about him, and briefly I explained.

“This is interesting here,” I remarked, indicating the glass-faced dial. “See this needle—it indicates the presence of anything liable to upset the Ondonian system. H'm—that's odd!” I looked more closely at the meter. “This needle is pointing to the Jovian words for ‘Extreme Danger.’ Now what the deuce is causing that, I wonder?”

Frot peered outside at the sky through the girders. “We can't see much of the sky with the Earth taking up so much room,” he remarked, then quickly. “That will be the explanation, Lee. Earth itself is causing the disturbance.”

I shook my head. “Not as I see it, Frot. The Earth is receding, therefore, it's not dangerous. No—there's



something else. Some terrific emanations in the cosmic which are affecting this delicate recording system. I wonder if—"

"Good heavens—look!" cried Lan Ronnit abruptly, pointing. "Look!"

At that identical moment two massive crescents, gleaming silver, were appearing from the edges of the slowly receding Earth—mighty objects that formerly had been hidden by the nearer bulk of Earth itself. With each passing moment they came nearer into view from their Earth-eclipse—one on each side of the globe.

"What the devil. . ." Frot began, and paused indecisive; then like a light, infinite remembrance came to me. I clutched his arm so tightly that he winced.

"Frot, those two planets which we saw before from the top of the powerhouse—then far off. They've been coming gradually nearer all this time, and until now the Earth has hidden them from our view. These instruments don't lie—they show what's coming. Quickly, man—from these instruments, which record rate of speed, direction, and everything else, can you compute what's going to happen to Earth? It looks as though she'll be jammed between them! Hurry—hurry!"

Immediately he turned to the instruments, and with assistance from all of us, and Valma in particular, charted the figures that were necessary. Then he set to work with the mathematical computations, to look up at last with an astounded, half-frightened expression on his keen visage.

"Lee, the most astounding thing!" he exclaimed. "Earth will pass safely between those invading planets—and their pull will save Earth from being drawn into our sun! Will, in fact, re-

turn Earth almost without tremor to its natural position in space. But—here is the amazing part of it all! Ondon has been slightly deflected in its orbit, as we know, by the force of my sound-projector vibration flung from Paliso, and it has made it that Ondon's orbit will pass *dead between those two planets!* It means the utter destruction of this world!"

"Good heavens — annihilation!" I breathed tensely. "The end of Ondon!"

"Exactly," Frot assented. "In fact, the end of the entire Ondonian Solar System. The terrific upheaval will wreck the remaining three planets—probably hurl them off into outer space. And to think that that sound-projector of mine has caused, in an indirect way, the destruction of everything! It's astounding! Almost as though it had been planned. . . Yes, Ondon will be crushed to powder."

"How long before the end comes?" I demanded quickly.

"At the rate of progress it will only be safe to stay another three nights on this world. By to-morrow, indeed, I anticipate the first upheavals caused by the approach of these two worlds into this system." He stopped, a puzzled frown on his high forehead. "It all seems so strange—so predestined. As though an actual mind had arranged it—"

"A mind!" I echoed hoarsely. "Great heavens, Frot, you're right! The mind of the Planet Brain! You remember! One of those two planets is the Brain itself—and the other is the mate it told us it was seeking. The Planet Brain has planned this, you may be certain. What fools we've been not to think of it before!"

"The point is, what's next?" Lan Ronnit asked cryptically.

"We'll carry on with our original plan," I answered grimly. "As soon as

Jelfel realises what's happening he'll be off into space like a shot. We've got to stop him doing that, at all costs. Our future home is on top of this Tower, guarding our space-time machine—our only link with Earth and safety. We're all right for food. The other thing to do is to explode all those space-ships and all Jelfel's machines with your sound-projector, Frot. Yes, we've got him at last! But somehow, before we go, I've got to have my body back!"

## CHAPTER XVII

### THE PASSING OF ELNEK JELFEL

**W**E turned about, climbed the staircase, and presently regained the platform. To repair the broken cabling of our sound-projector was but the work of a moment. I glanced at the guards securely fastened to the railings, then at Frot.

"Everything ready?" I asked quietly, my hand on the guiding-handle of the machine.

He nodded, and immediately I pressed the button, directing the faint beam occasioned by the megnetite crystals towards the distant spot where lay the fleet of dormant space-ships. Instantly the space became alive with the most unholy series of explosions. Blue-white light poured upwards to the skies accompanied by dense columns of thick, acrid smoke. Ruthlessly I kept the projector going until the entire area was a seething holocaust of smoke and flame.

"A marvellous weapon, Frot!" I panted, between intervals. "How are we faring? Ask Valma."

Valma, at the controls of our periscopic telescope aboard the ship finally reported that the entire fleet used for Earth-Ondon transit had been reduced to ashes. At that, I smiled grimly.

"Now comes a point," I said. "If I destroy the magnet, will the sudden stoppage of power result in Earth going to destruction, or—"

"You couldn't do a better thing," Frot interrupted. "It will enable it to reach its own natural position in space before anything can happen, and these two planets will keep it in position. Carry on!"

So again I pressed the button, and that deadly vibration focussed on the distant mass of the infernal magnet. The air itself seemed as though it would explode as the terrific force of one energy struck the magnetism of the other, resulting in instant disintegration. The monster-magnet, that had enslaved a planet, vanished in a blinding sheet of flame, and with it went the remaining space-time ships that had come from Earth. There was only ours left on Ondon! Unless Jelfel had others hidden away, which was not very probable.

"Now the power-house!" Frot breathed, tight-lipped and eager.

We all stood at the rail and watched that miracle of machinery disrupt itself with colossal violence. Débris soared skywards, smoke belched its way through the air and along the ground. The whole mass of Zagribud and the Tower trembled with the concussions. . .

"And that leaves only Jelfel!" I breathed at last. "Ronnit, you stay here and guard the ship whilst we go and look for Jelfel. He's going to have an operation performed under pressure. Come along, the rest of you."

We descended the first flight of steps, passed the Cosmic Detector room, and then came into the normal galleries—when quite suddenly we were firmly seized from behind. I beheld a small army of Jovians surrounding us.

"Right into the trap, Earthling!" sneered the nearest. "His Serenity is awaiting you! Come!"

The four of us put up a stiff resistance, but it was useless. Cursing and fuming at our ready acquiescence to take things for granted, we were piloted down corridors and staircases and *via* elevators, until at last we entered the familiar instrument rooms of Jelfel's own headquarters. He rose from a chair as we entered.

"Oh, it's you, Commandant!" he snapped out viciously. "Sit down—you and the others! You can go," he concluded in Jovian, and the guards departed.

"I escaped from the cupboard, Lee," he said laconically. "You see, the locks opened from inside as well as out, so the moment I recovered consciousness I released myself. A trifling point you missed, I imagine. My Thought-Imager revealed your thoughts to me—Yes, I confess I could not read them myself. My brain is indeed becoming badly clogged with useless earthly blood." He hesitated, then leaned forward. "Commandant, I realise that I have fought a battle rare between worlds—and—and have lost it!"

"It's about time!" I snapped. "Elna was nearly killed to-night by your damned guards up on the Tower platform!"

"I know all about that. I had those men placed there, following your thoughts, and of course I hoped to again capture you by surprise and destroy you for all time. You were too quick for the guards, however. You have blasted all my space ships to powder, you have ruined my magnet. You have broken all links with escape to another world—save one." He smiled strangely. "You may have a space-time machine, Commandant, but I still have the sixth dimensional

Rotator. I can project myself and some of my most intellectual comrades to yet another world. . ." He paused and seemed to consider; his next words were surprising. "I shall not again try to seize the Earth. I have decided it is better to seek an easier planet, where the inhabitants are not so tenacious in their opposition. A pity, for Earth is indeed a fair world. . .

"I find that Ondon is doomed. I have just been busy with my refractor, connected up with my Cosmic Detector in the Tower, and I have seen that Ondon's fate is to be crushed to powder. Before that happens I shall escape. But you will not. . . ." He smiled devilishly. "My intelligence is no longer capable of conceiving an interesting fate, so I will resort to the purely melodramatic. The four of you here shall be chained to the ground—to await the moment of cosmic catastrophe—alone on a doomed world! As for the space-time machine on the Tower top, containing Lan Ronnit, I will blow that to atoms—*now!*"

**H**E reached forth his hand before we had an opportunity to stop him, but at the same instant the great instrument room trembled mightily from end to end. The floor under our feet heaved like a miniature ocean roller. Instantly I was flung off my feet, to be tossed with my three companions and Jelfel into a corner. Delicate glass tubes and dials splintered to pieces with the sudden shock—but the most noticeable damage was the throwing out of alignment, in the next apartment, of the sixth dimensional Rotator.

"Gravitational upheaval! The encroaching planets!" Frot panted hastily. "The trouble is coming earlier than I calculated owing to you stop-

ping that magnet, Lee. Earth's movement is upsetting the equilibrium."

The opportunity in my hands, I literally seized it. I hurled Jelfel to his feet, and against the four of us he stood no chance. He glared balefully as I whipped my ray gun from his belt.

"Listen here, Jelfel!" I said grimly. "I've got you where I want you, now. I want my body, but I detest you enough to blow you, and incidentally my own body, to pieces, if you dare to make a false move. . . Go straight to the surgical laboratories, and give us a free passage as you go!"

"I'll—" he began furiously.

"You'd better!" I breathed dangerously. "Remember, you can't think enough this time to put yourself in another dimension, as you did once before when I tried to kill you. Get moving—or it's certain death!"

Again he hesitated, then the ray gun in the small of his back prompted him to take the line of least resistance, and he led the way from the instrument room. We followed him, I for my part keeping closely in touch with him.

Out in the main pedestrian ways there were distinct evidences of the havoc that had been occasioned by the shifting of the planet, slight though the shifting had been. Masonry was lying in our path at several points, and many of the towering edifices bore fissures from top to bottom. I shot one glance at the sky. The Earth had receded remarkably with the removal of the retarding force, and the two glowing planets—intelligent entities—were in the sky now at either horizon, one lower than the other. Finally, I presumed, one would vanish altogether on the other side of Ondon, whilst the remaining one swept ever nearer through space, until. . . . I found myself wondering

if the Planet Brain had deliberately planned this disaster. I could only presume it must have done so, even though it would certainly mean the inevitable destruction of all three planets. . . .

We reached the surgical laboratories at last, and, still under the menace of my ray gun, concealed however, from the surgeons, Jelfel gave brief instructions and lay down on one of the tables. Before I took my place beside him I handed the ray gun to Frot, and from then on he became tireless in his surveillance.

The anaesthetic hissed gently—

I revived to find Jelfel reeling Jovian curses and holding a heavily bandaged head.

"What's the trouble?" I asked of Frot.

"Retribution indeed," he answered grimly. "Another ground tremor a moment ago, during the final touches to Jelfel's brain, and the instrument slipped! It has damaged Jelfel's brain somehow. That means—"

"Madness?" I interrogated in a whisper.

"I can't say. No knowing what the effect will be."

Frot became silent and Jelfel rose slowly from the table and dropped to the floor, still holding his bandaged head. For a moment or two he looked at us with burning eyes, then to our surprise turned and walked from the super-surgery without a single comment—a strangely detached, many legged figure.

I shrugged and then turned to feel my limbs with gratification. "That feels good!" I said in satisfaction. "My own body and my own brain. The only difference lies in a new face, but so long as it's Earthly what matters it? I don't quite understand Jelfel's mood, though."

"Be hanged to him," Elna said abruptly. "Our work on Ondon is ended, Sandy. Let's get along and find Ronnit. I'm uneasy without our ship."

We turned about and left the surgery, but the instant we set foot in the open again, the great gravitational upheaval was fully upon us. A sudden noise like the mightiest thunder crashed through the air, and we were all four flung headlong down the six steps to the pedestrian ways outside.

Sore and bruised we gained our feet, and as we did so the heavens above were slashed across with blinding lightning. The ensuing thunder in the dense air was the most devastating din I ever encountered.

"Disturbances in the air!" bawled Frot. "Moisture—condensation. Hell to come!"

But I had my hands too full to concern myself with his remarks. Zagribud was a suddenly changed city. Overhead, where formerly the sky had been clear, there was now a thickly swirling mass of inky clouds, seeming to make the great bulk of the threatened super-city all the more sinister.

Clinging to each other's arms we forced our way through the Jovians, who were by now too panic-stricken to notice us. Our one aim was to reach the great Tower where lay our last link with home. . . . Then abruptly it started to rain. I never knew such rain in all my experience of space and time. A tremendous deluge burst forth from the lightning-riven heavens above, boiling cataracts, that hissed and swamped down upon us, bore us flat to the ground. Water was in our eyes, our ears—choking and blinding. . . .

With enormous effort we struggled slowly up—I imagine the rain was so heavy owing to the extra gravitative

pull—and fought our way inch by inch along the metal way, holding tenaciously to each other's sodden clothing.

"The Tower! Look!" Elna shouted suddenly, lifting a rain-splashed face and pushing damp, dripping masses of hair from before her eyes. "Look—it's collapsing! Oh, great heaven, that means our space ship—!"

Petrified with horror we watched ensuing events. A tremendous fork of lightning was followed by another violent earth tremor. (I call it such for convenience.) The lightning blazed in fiery plumes about the summit of that two thousand-foot mass, and we distinctly saw pieces of metalwork go spewing outwards into space—but the earth tremor finished the entire catastrophe. The Tower visibly moved to one side even as we watched through the stinging sheets of rain, rocked dangerously, and then went crashing over away from us with a ground-shattering reverberation, ploughing down mammoth edifices as it fell, as though they were packs of cards.

"Our ship—Ronnit—it's all gone!" Valma choked huskily.

"Looks like it," I groaned. "There's nothing for it but to try and reach the fallen Tower. The ship might have been thrown clear. Come on. . . ."

MY idea was easier in theory than in carrying it out in practice. We left the pedestrian ways and went into the lower traffic-channels, dodging the curious vehicles, hopelessly out of control, as well as we could manage. Once we all fell into a water-choked gully, to find water chest deep. A sucking undercurrent from some kind of drainage system strove to drag us downwards, and only by enormous muscular effort did we manage to flounder out again,



panting and exhausted with the effort.

The shaking of the ground had now become a constant thing. We went in terror of our lives, hardly aware where we were, only aiming blindly through the smother towards the distant fallen Tower.

Then suddenly our progress was halted. Ahead of us, clearly visible in the flashes of lightning, another earth-ripple was approaching, moving and razing buildings as it advanced. It had, however, a sideways movement, and seemed to be moving away to the left as it approached.

"Quickly—in here!" Elna suggested gaspingly, pointing to an open doorway that somehow seemed vaguely familiar, and we incontinently adopted her invitation, blundering after her in the darkness within. Then, as I chanced to lean heavily against the wall, it suddenly collapsed inwards and bowled me into a familiar room. In a moment I recognized it as Jelfel's instrument room. To our ears came the sound of explosions and splintering glass—a sound akin to the destruction going on outside.

"What is it?" Elna demanded.

"We'll soon see," I responded.

Cautiously we advanced along the shaking floor and peered into the next apartment—to behold an amazing sight. Elnak Jelfel himself was deliberately destroying his own instruments with a ray vibrator. Assiduously pressing the button on his weapon, he watched his glorious machinery, his masterly conceptions, blow to powder beneath the force.

Then suddenly he swung round to behold us. It was too late to escape. . . . He smiled peculiarly.

"Come in, Commandant!" he invited drily. "You will be interested

in what I am doing. You see, it is no use retaining instruments and devices which you do not understand."

"What do you mean by that?" I asked, moving forward.

"Just this." He motioned us to the familiar bench, then eyed us, still smiling very lightly. "In replacing my brain into my body, the instrument slipped because of an earth-tremor," he said quietly. "That mistake cost me all my knowledge! Ordinarily, I would have slowly risen again in knowledge as my blood-stream supplied my brain; as it is my brain will always be defective. I shall be no cleverer—if as clever—as a very ordinary Earthling. I could, of course, have used a sound brain from a Jovian and it would have perhaps served my purpose—but there is not the time. These machines, which only I understood, are, therefore, useless. Zagribud itself is on the threshold of doom, and I, my friends, am prepared, too, to meet my fate. The power of Elnak Jelfel is ended. . . . Maybe I do not regret the end of genius!" He looked at us thoughtfully before he went on.

"Strange Fate it is indeed that urges a man to achieve one fixed thing, and when he achieves it, it recoils upon and destroys him! So it has been with me. My one wish, besides transferring Jovian brains to Earthly bodies to enable our race to grow on Earth, was to put my brain in your body, Commandant. I did it, and that very act destroyed it! So be it, Commandant. There is, however, one thing I have discovered—"

"What?" I enquired, as he paused.

"Just this. With normal reasoning—I call my present state normal reasoning—there comes a tempering of mercy, of humaneness, and a vaster knowledge of the difficulties of others. It is difficult to have compassion when

one is given the knowledge of a great genius. I am not egotistical when I say I have been clever—perhaps the most brilliant scientific creature that ever existed—but, somehow, I am glad to be natural. . . . Commandant Lee, Miss Folson, Valma, Anton Frot”—he looked at each of us in turn—“you are among the most courageous Earthlings I ever knew. And I thank the queer Fate I am obeying that I have been prevented from doing any of you irreparable harm. I seek now only the peace of the cosmos. . . . Good-by, my friends.”

And with that he turned back to his activities of destruction. We stood watching him for a space as he destroyed his amazing inventions one by one—his Emanation Detector, the remains of his Rotator—his Light-Wave Trap—all his super-instruments one after the other. In some unaccountable way I felt sorry for him, though I had no reason to be. He seemed an oddly lonely figure, fighting a last battle with the calm resource and courage that had always made him so outstanding a character. . . . That was the last we saw of him.

We tip-toed from the laboratory and out into the seething hell outside.

## CHAPTER XVIII

### ANNIHILATION

**T**HE rain had ceased but the earthquake seemed more universal now. As we progressed, great masses of masonry and metal tumbled through space, narrowly missing us in several cases. The main lights of the city had gone out. From base to pinnacle Zagribud was becoming a collapsing ruin. . . .

We staggered at last over the boiling torrent near the base of the fallen Tower, and finding a little more free-

dom raced along the two thousand five hundred foot length as fast as we could go. Once we reached the broken mass that had been the summit, our hearts sank. In the rain and murk and heaving mud there was no trace of our beloved time-space machine!

“It’s no use—it’s gone!” Valma panted hoarsely. “We—”

“Look!” Elna screamed suddenly, her arm shaking with terror as she pointed. “See—that fire! What is it?”

I spun round and gulped hard in my throat. Against the distant horizon I loomed an encroaching luminosity slowly lighting up all heaven through the storm-racked clouds above. In an instant I realized the truth. The encroaching planets were almost upon us—were even now hurtling with terrific speed out of infinity towards each other—chained by the unbreakable force of negative drawing positive.

Zagribud lay a patterned immensity of toppling silhouettes, against that flaming abyss of destruction and death.

“It is the end!” cried Frot huskily. “Quickly! Run! Anywhere!”

“No use in running,” I returned tensely. “We’re done for, and we might just as well stand where we are.” I kept my feet with difficulty on the heaving ground as I spoke—then suddenly at a different sound—a dull thud, I turned around. My heart nearly forced its way through my chest with crazy joy.

Not ten yards away stood the time-space machine!

“Hurry! Hurry!” thundered Lan Ronnit, from the air-lock doorway.

We did not need those instructions. Clutching each other we floundered through the mud and staggered through the open doorway. The

clamps shot into place, the Particle Disintegrators instantly operated, and in another instant we were in the void and leaving the stricken planet far below us. . . .

"Not difficult," Lan Ronnit explained, as we questioned him. "When the Tower was in danger I simply flew off into the air and moved on a few hours in time. Then I came back into the right time—but some providential fate guided me right to you at the exact instant. Really remarkable! We're away in space now—safe. But look out there!"

In dead silence we stood at the window gazing upon the doomed planet of Ondon as the two planet brains came towards each other. It was even as we stood there that there came through the silence of the void outside us a familiar, profoundly deep bass voice.

"A sacrifice, my friends—the sacrifice of the Planet Brain! I planned it, and it shall happen. I shall return your Earth safely to its rightful place; I have already restored the Earthlings who were operated upon by the Jovians. They know nothing of what has happened to them. Henceforth there shall be peace! It was I who guided Lan Ronnit to you in your

moment of need. . . . And now to end this everlasting increase of knowledge. Even a Brain grows tired; I seek peace—and in reaching that ultimate of peace I will destroy forever a menace. Even a Brain must die. So be it. . . ."

We stood in dazed fascination as the words ceased and then we beheld the three planets as three bright balls directly in line.

"Our work is ended," Frot said. "The Planet Brain has completed all the details— Ah, look at that!"

We watched, rooted to the spot. Suddenly the entire Ondonian solar system vanished in a blinding coruscation of light. Terrific glare that was blinding in its intensity— A silent and complete destruction—the fusion and disintegration of three planets—and the flinging into the void of the other remaining worlds.

Then quietness again. A solar system composed of countless fragments of glowing particles—a massive nebula, to form one day another solar system. The inevitable law of space and time.

"It is ended," Valma said quietly. "Three words alone can sum it up—Expectation, Realization—and"—he smiled grimly—"Annihilation!"

THE END

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# Daughter of Luna

By J. LEWIS BURTT, B.Sc.

*We are glad to present another short narration, referred as in the preceeding stories to Luna, the moon. This story is placed in an early geological period when the saurians long ago wandered over the face of the earth. These events will be found to be quite exciting in the description of old-time combats.*

## *In the Days of the Dragons*

**T**HE sudden disappearance from the earth of those gigantic reptiles known as the dinosaurs has been a source of puzzlement to many scientific minds. Apparently in their day these great creatures were supreme on the earth, probably almost immune to the feeble attacks of primitive man, and certainly in no danger from any other animals. Yet they have disappeared and, so far as is known, within a surprisingly short period of time. It is therefore obvious that some new factor must have been introduced rather suddenly into the conditions of their existence, a factor that must have had something to do with such a rapid extinction of the whole genera.

Perhaps the account here given may help to solve some of the mystery.

**I**N the early days of man's life on the new planet, the Daughter of Luna, conditions were very different from those we now enjoy. Man himself was in a state of development little, if at all, higher than that of the most primitive races to be found on the earth today. His world was one of great forests, of gigantic and treacherous swamps, of tangled jungles. And through those swamps and jungles roamed those grotesque monsters that

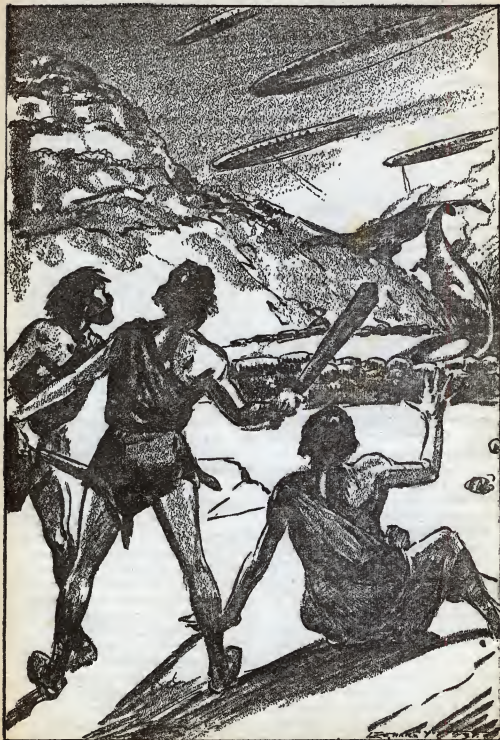
we group together under the generic name of dinosaurs.

These creatures, at that time, were the lords of the planet. It is admitted that such animals as the great cats, some species of which were already in existence, and other agile creatures, particularly the carnivores had a great deal of their own way in the drier and more open regions, but the giant lizards, the dinosaurs, held undisputed sway over all the lower lands in which they dwelt.

Primitive man was almost powerless against them. His only defence was his ability to out-run these slow-moving creatures, which, for all their immense size, were yet sluggish in action as well as slow of intellect. They were great in size, small in brains.

It must have been an extremely fortunate thing for mankind that most of these dinosaurs were peaceful, herbivorous creatures, for otherwise man, with only his primitive weapons such as throwing and smiting stones, would have been wiped off from the face of the earth.

Even as it was, there were sufficient of the more dangerous carnivorous lizards about to keep the human tribes very much on the jump, and it was no uncommon thing for a herd of hunting dinosaurs to trap a group of human beings in a position from which they could not escape, after



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which their extinction was merely a matter of the time required to kill and eat them.

So, at the date of this story, perhaps thirty or forty millions of years ago, the human race was reduced to little more than a handful of scattered tribes, harried in the uplands by the swift and powerful carnivorous mammals, and in the swamp lands by the practically invulnerable dinosaurs.

IT was one of these scenes of unequal battle on which one of the Venerian observers one day focussed his telepovisual machine.

The picture that confronted him was that of the mouth of a great cavern, obviously the dwelling of a human family or small group of families. There, crouched in the mouth of the cave, behind a rude barrier of rocks, stood or knelt a little band of perhaps thirty men, with a somewhat greater number of terrified women and children.

Outside the barrier, which had obviously been constructed for defence against just such emergencies, there crawled and fought an immense number of gigantic dragon-like creatures. Hideous creatures of frightfulness they were, pachydermatous lizards, with claws capable of tearing into shreds the largest of their enemies, with huge, toothed jaws from which the steaming breath issued in clouds of vapour, giving them, in the half-light of dawn, the appearance of fire-breathing devils from the bottomless pit itself.

And ever and anon one of these gruesome beasts would reach out a great, scaly claw and, stretching over the barricade of rocks which was too strong for even his powerful muscles to remove, would feel around blindly for the men cowering behind it.

Apparently things had reached a state of deadlock. The barrier was too strong for the dinosaurs to tear down, the apertures were too small for them to crawl through, and the defence that was still being made by the men of the tribe deterred the lizards from making an attack in sufficient strength to destroy the barricade.

But though it appeared to be a case of stalemate, yet, in the end, it must prove to be a victory for the attackers. Once the men in the cave had used up their tiny reserve of food and water and had become too weak even to thrust at the eyes of the monsters with their pointed sticks, or to hurl their remaining store of "throwing stones" at them, then the great dragons could just take their own time about pulling the barricade apart bit by bit, until in the end they got what was left of their long-awaited meal.

The one hope of the tribe was that the dinosaurs would abandon the siege, as they often did in such cases, their brains not being capable of retaining an idea for very long.

But, in this particular case, it did not appear that even this hope was of much probability of realization. The dinosaurs were very obviously hungry, and a hungry dinosaur can be a most persistent creature, especially so long as he can smell and sight food.

THE venerian observer studied the picture for some considerable time. It became clear to him that the men were nearing the end of their resistance, and that for this time at least, the dinosaurs were determined not to give up until they had secured this juicy meal that lay just beyond their reach.

Suddenly the observer looked up from his screens.

"It seems a great pity that the men of Earth should be gradually wiped out by these hideous monsters. Why has the Council never taken any steps to aid them I wonder?" he remarked to his companion.

"It is strange, isn't it?" responded the other. "Perhaps there is some good reason, or perhaps it is just that the thing has never been brought to their notice."

The first speaker jumped up from his seat.

"Then," he said in a very decided tone, "I'm going right now to find out."

"But," the second man objected, "you can't disturb the Council while they are in session!"

"Can't I?" the first answered abruptly, "Come along with me and I'll show you whether I can. If we wait to put our idea before them in the official way it will be too late for us to do anything for that tribe."

"Look you," he continued as a further idea struck him, "You go and get the space-cruiser ready for action, put in plenty of fuel, provisions and weapons. I'll tackle the Council and be ready with permission to sail, by the time you have everything fixed."

The Council certainly got a surprise when the young man burst in upon their deliberations so unceremoniously, but his very zeal and forcefulness caused them to lay aside their business and listen to his plea—a thing that I can scarcely imagine any earthly council doing, by the way.

As soon as they understood just what he was driving at, for I must admit that his explanation was not of the utmost lucidity or coherence, so excited and enthusiastic was he, they agreed, almost without discussion, that something should be done. They felt that, as the more advanced race, it was up to them to give what help

they could to prevent the extinction of a brother humanity.

Then the observer informed them of what he had done, telling them,

"My Lords Councillors, I have already got my friend, Althor, to prepare my ship for flight to Earth—with the Council's permission of course—and by this time I expect she is almost ready to sail, needing only a crew of about twenty men to operate the weapons that we shall have to use against these dragons."

One of the councillors spoke up.

"Young man," he said, "you certainly are a man after my own heart. You certainly took a big chance in bursting in on this Council as you did, and now you have the nerve to tell us that you are ready to sail, having assumed that you would have no trouble in getting our permission apparently."

"Just for that I am asking the Council's permission for you to sail, though I know by the looks on the faces of the councillors that such permission is already granted, and also I am asking for leave to accompany you and join in the fun."

**W**ITHIN a remarkably short space of time the Venerian rescue ship was on its way to Earth. Fortunately the positions of the two planets were such as to make a rapid trip possible, so there was a reasonable chance that they would reach earth in time to effect the rescue of the beleaguered tribe.

Several times during the voyage they thought that the end had come for the imprisoned families, but at the time of each attack the defence, feeble though it was, was successful in holding back the monsters, several of which were blinded by the sharp sticks of the defenders.

But still it was obviously going to be a near thing. It took a full three days for the Venerian ship to make the journey, and much can happen in that length of time.

There was, of course, no way in which they could let the earthmen know that help was on its way, for they had no means of conveying any kind of message to these primitive beings, who had nothing whatever in the way of machinery or apparatus, and the great fear was that the defenders would give up the fight through the very hopelessness of their task and let the great dragons get in and put an end to their misery.

Fortunately, however, the leader of this particular tribe was a man of unusual courage, one who would keep on fighting to the very last gasp, and so, when the ship did at last reach Earth, the siege was still being carried on.

The surprise of the tribe, when these great ships suddenly swooped down from heaven and burned up all their enemies with flaming rays, can best be described in the simple words of the chief himself, who, when asked to tell just what happened, answered.

"Dragon come. Many dragon come. All man, with she-man and little-man, run fast to cave. Three and four man dragon catch and eat.

"Dragon get outside cave. Many dragon get outside cave many days. Man fight with stick. Man no frighten dragon away. Man no more get eat. Man get empty inside. Man get dead very quick.

"Gods come. Man no get dead. Gods kill all dragon with magic. Gods good to man. Gods give man eat. Very good gods."

That, from the tribe's point of view, expressed it exactly. By magic had the gods learned of their need. By magic had they come to the rescue of

the tribe, and the tribe recognized their debt in the only words they had to express it.

**B**UT the Venerians did not just let it go at that. Their work was not yet done. Truly the tribe had been saved for the time, but before long the same thing was going to happen again. Just so soon as another herd of dragons got hungry and smelled out this or some other tribe there would be exactly the same struggle all over again.

To let things go now would be to have wasted most of their efforts, for either the race of men must perish from the Earth, or else some means must be found of protecting them against future attacks of the same kind.

To search out all the haunts of the dinosaurs and to destroy them wholesale with heat rays, as one of the Venerians suggested, seemed to be a good way, but, when it was examined carefully, it was found to be impracticable, both on account of the amount of power required for such a vast project, and also on account of the terrible damage that would result to Earth's vegetation and to the countless beneficent forms of life that must be destroyed along with the dragons.

The matter was debated earnestly, and occasionally somewhat hotly, by the Venerians, many suggestions as to methods of wiping out the terror being put forward, but none that seemed satisfactory.

In the end it was decided that the immediate and violent destruction of the whole race of dinosaurs was not a workable idea, and so they turned to means of helping the tribes to make their own defence against their enemies.

In order to effect this, the Venerians

called together a number of the tribes in the district—afterwards repeating their procedure in other districts—and explained to them that they would show them a new method of defending themselves against these terrible monsters.

First of all they gave them the means of making fire, though this was only done after considerable debate, some contending that to give fire to such a primitive people might do more harm than good, and perhaps result in almost irreparable damage being done to their planet. However, the final decision was in favour of making this gift, one deciding factor being that the vegetation of most of the Earth, being that in swamp lands, would not be in danger of burning extensively. And so Earth man got his gift of fire.

Then they revived that ancient Venerian weapon the bow and arrow, and taught men the elements of archery, training them to aim either at the eye, a rather unsatisfactory target on account of its smallness and its position at the side of the head in most dinosaurs, or else at the throat where there was, in all except one or two species, a small patch unprotected by the heavy, armour-like skin.

So far, so good. The only difficulty, other than the erratic shooting of most of the tribe, was that the beasts were so huge that even when an arrow did strike one of the vulnerable spots, it penetrated such a short distance as to do nothing more than annoy the beast—with most unpleasant results in most cases.

Obviously something more effective must be devised.

It was the chief of the rescued tribe who finally solved the problem. One day he saw a snake lying asleep

or sunning itself on a rock and, as usual, heaved a throwing-stone at it, killing it instantly. Then, bringing it to show to one of the Venerians, he remarked,

"Snake dead. Snake good dead. Snake very bad not dead. Make little bite. Little bite make man dead quick."

And then it was that he got his great idea, a veritable stroke of genius for so primitive a man. Suddenly he squatted down in front of the dead snake, obviously trying to puzzle out something.

For a long time he sat like that, not moving so much as a single muscle. Then, just as suddenly as he had sat down, he got up and called the tribe, and the Venerians, to him.

"See," he said, "Snake bite little bite. Little bite make dead. In snake tooth dead-stuff" (the only word he could find to express the idea of poison) "Put dead-stuff on arrow. Make dragon little bite. Make dragon dead."

Simple? Yes, but how many ages often pass before some great genius figures out the way to make use of some simple little thing like that!

There was no dearth of snakes. For these primitive people they were not difficult to kill either with their throwing stones, or by the simple process of catching them suddenly by the tail and cracking them like whips against the ground.

Before the day was over the whole tribe had armed itself with the new weapons, poisoned arrows, and was ready to set out in search of dragons, confident that they could now lick any number of these great beasts.

And did they make a slaughter! That first dragon hunt was a thing to be told of for generations, not only in that tribe but all over the land. Truly

one or two of the more reckless of them got killed by the dragons, one man being shot by one of his fellows, who proved to be even a worse shot than the average. But, on the whole, the hunt was supremely successful, in spite of its nearly-tragic aftermath.

It was only due to the fact that the snake poison used was one of those that reacts more violently when injected directly into the bloodstream than when taken into the stomach, that saved that tribe from complete extinction. What must they do, after killing off a whole herd of dragons, but celebrate their victory by making a great feast of roasted dragon's meat (Oh surely! It hadn't taken them that long to find out the uses of this new fire-thing), and they entirely overlooked the fact that a poison that was virulent enough to produce death in a dragon when administered through the scratch of an arrow, was also virulent enough to cause most unpleasant consequences when administered to human beings by way of that same poisoned dragon's flesh.

However, as we said, the tragedy that might have happened did not happen, though the tribe, to the last man and woman, was so violently sick for a couple of days that never again did any of them attempt to eat dragon's flesh, either poisoned or otherwise.

AND so the Venerians left them once again. They had now the means of exterminating their horrible foe. Whether or not they made good use of their opportunities was now their own problem.

That they did take advantage of their new powers seems fairly obvious when one considers the rapidity with which the swarming dinosaurs disappeared from the earth, leaving only a hateful and fearsome memory, a memory that even today remains in the countless stories and legends of dragons, legends that are so much a part of the folk-lore of all the earth as to emphasize beyond all question the fear and terror in which man lived during these ancient days of the dragons.

THE END



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# *Annus Mirabilis*

By EDWARD CARLISLE

*There is a definite quality in this story of interplanetary and cosmic happenings. The attention is held, while the reader follows the text and wonders what strange event is to come to pass among the planets and the bodies of the heavenly system. Interest and suspense are well maintained in the "Wonderful Year" "Annus Mirabilis."*

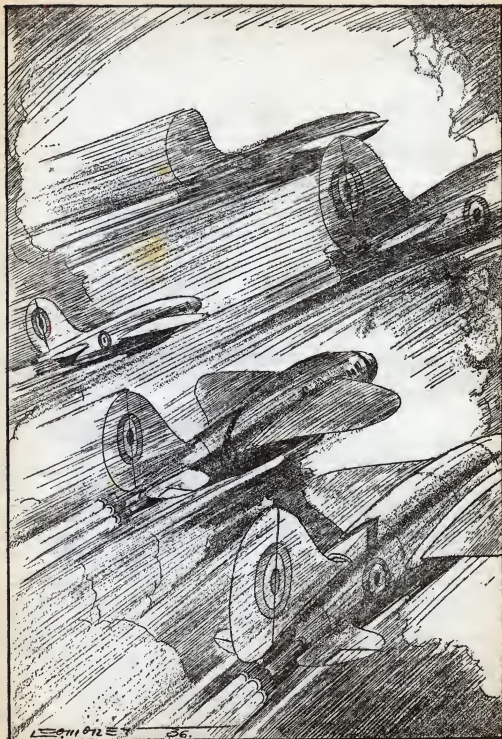
THERE can be no doubt that of all the pages in the book of Time the title of "Annus Mirabilis" applies most fittingly to the one headed "1975 A.D." In that year a series of catastrophes befell our planet, coming upon the Earth with such rapid succession that the mind had barely time to fully comprehend one before another had suddenly reared its head. Each succeeding catastrophe was more horrible and more nearly fatal than the last, yet each time the major part of the human race was saved as if by a miracle. It was as if the God of Creation and the God of Destruction were at war to determine which was the stronger, and the Earth was the battlefield.

For nearly fifty years there had been no great wars upon the Earth, but in 1975 all the great nations of the world began to rush preparations for war. Early in January England declared war on Russia, Germany immediately came to the aid of the latter, and England was speedily joined by France, Italy, and Japan. China allied herself with Russia and Germany before the end of the month, but America tried to maintain her traditional policy of isolation. It was apparent to all however, that she favored industrial Russia and Germany.

Owing to the record snowfall of the winter of 1974-75 it was difficult to transport troops or even use bombing planes, so that both sides concentrated on disrupting the enemy radio communication with the interference rays, and manufacturing large numbers of combustion guns. This latter invention was a device for throwing a ray by radio waves in such a way that the area on which it was concentrated was heated to the combustion point. Two guns had to be trained on a given area to produce the desired effect, but the device had a practically infinite range, its effectiveness having been proved to extend at least two hundred and fifty thousand miles.

In America the only signs of future trouble were the production of vast quantities of airplanes and combustion guns, a slight increase in the size of the army, and a wave of patriotic enthusiasm for war, which was bitterly opposed by an organized drive of the pacifists.

Affairs stand thus as our story opens one cold evening in early February in the observatory of Luther's College situated in the quite village of Medville, Mass. Luther's College was one of the few small colleges left in America, but it had an observatory out of all proportion to its size, the



*The fleet shot high above the atmosphere of the earth over the Atlantic ocean, and glided down over England, separating to cover the whole island, keeping high in the air so as to remain invisible, and gliding so that the sound of their rockets would not betray them.*

main instrument being a magnificent refractor with a thirty inch object glass.

Gazing into this instrument on the night of February 3rd was a tall, light-haired young man of about twenty years. Beside him sat a rather plump girl of about seventeen. Ann Potter was one of those rare girls who combine a pleasing exterior with a naturally sweet temperament, and a healthy outlook on life. She had brown, wavy hair cut in sensible bob, and her dress was informal, but neat. She had a generous mouth, whose curving lips constantly betokened the cheery nature of the owner's thoughts. Her eyes were of that bewitching hazel color which becomes green on bright sunny days and blue when the light is dim. Ann was the daughter of Professor Potter, the head of the Astronomy department of Luther's College.

Jack Newton, the young man who was dividing his attention between the telescope and Ann, was working his way through college as an assistant in the observatory. He could have obtained much more lucrative jobs than that of an assistant in Astronomy, but two things had decided him on the position: one was his interest in astronomy, and the other was—Ann! This was Jack's last year in college, and the fourth of his acquaintance with Ann. The two had sat up many a long hour through the silent watches of the night, gazing up into infinite space and enjoying the sense of the vastness of the universe and the beauty of human companionship in silent appreciation. Tonight they were waiting for the crescent moon to rise in order that they might view for the hundredth time the awesome and spectacular beauty of our satellite.

Suddenly Jack uttered a startled

exclamation. Then, after a few seconds of tense gazing through the telescope, he thrust Ann toward the eyepiece of the instrument.

"See if you can see what I see!" he ejaculated in ungrammatical excitement. "Look at Aristarchus, near the center of the illuminated part of the lower quarter. Quick, Ann! Tell me what you see!"

Ann gazed in silence for a few seconds. She was looking at the crater Aristarchus, usually one of the brightest spots on the moon. But now a round black shadow was moving slowly across it, a shadow of about the size of one of the smaller craters, five or ten miles in diameter.

"What does it mean, Jack?" she asked in an awed whisper. "Can it not be something on the object glass?"

"Impossible! It is too well defined for that. It must be—it has to be—a satellite! A satellite of the moon! And we are the first to discover it!"

"But Jack, how could it have remained undiscovered through all the years of observation the moon has undergone?"

"That's so," said Jack in a more thoughtful tone. "It must be a new satellite—a captured comet or meteorite. But it seems too big to be a meteorite. Let's call your dad. Perhaps he can explain it."

**P**ROFESSOR POTTER was a conservative old man whose interests in life were almost identical with those of Jack Newton—astronomy and Ann. He hurried immediately to the observatory upon receiving Jack's urgent request for his presence, for although he knew that it was unlikely that the two youngsters had made a very important discovery, still he had enough respect for their knowledge of his favorite subject and their accu-

racy of observation to make him come speedily when they announced a discovery.

After listening closely to Jack's excited account of the manner of the discovery of the shadow, Professor Potter seated himself at the instrument and remained there in silence for several long minutes during which Jack and Ann stood with clasped hands at his back, scarcely daring to breathe. At length the Professor relinquished the telescope and turned slowly around.

"It is evident," he said solemnly, "that there is an object between us and the moon. It is roughly circular in form, about ten miles in diameter and moving about two or three miles a second. It is the object itself that you were looking at, not its shadow. If you had observed more closely, you would have seen that it had a bright line along one edge, which is as much of it as is illuminated for our viewpoint at present, and that the transit of its shadow is taking place a little after the object itself."

Jack and Ann took turns looking into the telescope, and found that the professor was right. A fainter and much smaller shadow was following the larger one across Aristarchus.

"What this object is," the professor went on after some thought, "it is hard to say. A comet would hardly be so compact, and a meteorite would not be so large. And its speed is another surprise. Knowing the velocity of the moon to be about 3350 feet per second, and knowing the diameter of the craters the shadow is passing, it is easy to estimate the object's speed as about two or three miles a second. Now a comet would move much faster than this, and a large body such as this is, if falling toward the sun when captured, should have had a far greater

velocity. What it is, where it came from, and how it was captured are all mysteries to me. But that it has been captured by the moon is evident from the fact that judging from the relative size of the object and its shadow, and their distance apart, the object must be within a hundred miles of the moon's surface."

After a few more observations and a lot of fruitless debate as to the origin of the object, it was decided to telegraph the discovery to one of the larger observatories in order to have the object more carefully scrutinized and photographed before it became invisible behind the limb of the moon. The next morning along with the news of devastating conflicts in Europe and Asia, and accounts of whole villages marooned by heavy snowfalls, the newspaper headlines bore the report of the discovery of a mysterious satellite of the moon, whose presence was puzzling the greatest astronomers in America.

The next week was one crowded with happenings of world-wide importance. Half of Germany was reported to have been consumed by combustion guns. All Sicily had been melted into nothingness. England had been cut in two, and Japan completely annihilated. America declared war on the side of Russia and Germany, and no sooner had she done so than a strip twenty miles wide from the Great Lakes to the Gulf of Mexico was burned to cinders by Canadian and French combustion guns. Washington and New York were wiped out completely. American planes located, and American combustion guns destroyed both the French and Canadian artillery centers, effectively crippling their combustion gun attack. Floods from melting snows in the vicinities bombarded by combus-

tion guns killed almost as many people as the guns themselves.

Throughout this week of horrors Jack had not been passive. He had joined the aviation department immediately on the declaration of war, and had even been one of those who located the Canadian source of attack. But throughout it all, he, in common with many others throughout the world, had found time to observe the strange behavior of the mysterious companion of our moon. It had disappeared around the limb of the moon, only to appear at the same spot two days later going in the opposite direction! Such a change of direction was absolutely unheard of among any heavenly bodies. It could mean only one thing: the guidance and control of an intelligent mind! But where was the intelligence located that controlled this mysterious object. Had the inhabitants of another planet built a vehicle ten miles in diameter, and if so, for what purpose were they exploring the surface of the moon? The strange object remained visible for the remainder of the week, moving backward and forward above the lunar landscape in a methodical, apparently intelligent way.

On Friday, February 12th, Jack was visiting Ann at her home. He was to leave in the early hours of the morning on a dangerous scouting expedition to England. Therefore his farewell to Ann was unusually serious. The two sat together in a wide easy chair, talking softly while an invisible radio furnished quiet music.

"I am afraid we have not much of a future to look forward to in this world of ours," Jack was saying gloomily. "People are being exterminated by the million—like so many insect pests—by the war, and by the heavy snows. Just think of it, Ann.

The whole Japanese nation, once a thriving, industrious, numerous people, has been completely wiped out. Japan is now a group of barren, burnt-out islands. Not a soul is left alive. And it seems to me that the same thing is bound to happen to the rest of the world. We will keep on burning each other to death with our too powerful combustion guns until the last man has perished and no living thing breathes upon the surface of our world."

"What a horrible picture you paint," said Ann with a shudder. "Is there no hope? Can't a peace be patched up somehow?"

"I am afraid not. Each side thinks it is in the right, and the fight will go on till one side is completely vanquished." Then Jack threw off his pessimistic mood and took Ann into his arms. "But don't you worry, sweetheart," he said with a tender smile. "When all is over there is bound to be a quiet corner somewhere in the world where I can live with my green eyed girl!"

"My eyes aren't green," Ann declared with a pout. "They're hazel."

"Let me see," said Jack. "Perhaps I'm not close enough to tell." And with that Jack gave evidence of being very near-sighted by bringing his eyes within an inch of Ann's. But he could not have told what color they were for hers were closed.

At this crucial point in their farewell interview, the lovers were interrupted by the voice of the radio.

"We have a very important announcement to make," said the invisible voice solemnly. "The announcement comes from the Lowell Observatory at Flagstaff, Arizona, and reads as follows: 'It has just been discovered here that Phobos, the inner and larger moon of Mars has disappeared.



It so happens that we have been engaged in making a series of photographs of that planet, and in checking over the photographs, we find that Phobos disappeared on the first of February. In view of the fact that the new companion of our moon was first seen on the night of February 3rd, and that it is the same size as is Phobos, it seems probable that the two are identical, and that Phobos was transported to its present position by the inhabitants of Mars by some means and for some purpose unknown to us. This is not, of course, a proved fact, but the degree of probability is high.' "

Jack and Ann looked at each other in surprise. So their discovery was a satellite of Mars controlled by Martians. But what was the significance of this new development? Did it mean an invasion of the Earth from another planet?

"Ann!" said Jack as the idea struck him. "If we could only convince the world that they were being attacked by Mars, it might stop this war! By concentrating in an attack on Phobos, we could unify the world against a common enemy."

The two discussed Jack's idea enthusiastically, but soon came to realize that it was a hopeless task to convince the world that it was being attacked if it wasn't.

"I could almost hope that they will attack us," said Jack finally, as he was about to leave. "They could certainly devise no more horrible method of warfare than the one we are using now. To be burned to death is about the most painful death one could choose."

**E**ARLY the next morning Jack set out for England, as one member of a small scouting fleet of rocket

planes. The fleet shot high above the atmosphere of the Earth over the Atlantic Ocean, and glide~~d~~ down over England, separating to cover the whole island, keeping high in the air so as to remain invisible, and gliding so that the sound of their rockets would not betray them.

Each plane contained two men, the pilot and an observer who searched the ground with powerful glasses. Jack was the pilot of his plane. He had been assigned to the hills in northern England, and as his plane swooped over the region to be searched, it was not long before his companion cried out that he had found a large battery of combustion guns. As the object of the trip was now accomplished, Jack banked the plane and began the return trip. But before he was out of sight of the island, he had come so low that he was visible to the English sentinels. His only hope lay in getting out of the sight of the gunners before they could aim, so he turned on the rockets.

Even as the plane shot up into the clouds in response to the powerful push of the rockets, the battery of combustion guns was trained on it. The ship was built almost entirely of asbestos, but as Jack turned and twisted in an effort to avoid the deadly rays, he felt that the end had come. If the necessary two rays should strike the ship for more than a few seconds, the heat would be sufficient to kill both passengers.

As his plane reached the limit of its climbing powers, Jack beheld two other ships of his party also fleeing from the deadly guns. Jack's companion signalled by a prearranged signal that he had found a battery, and the other two planes immediately dropped below Jack to shield him as much as possible from the rays.

Hardly had the two accomplished this chivalrous feat, when first one, then the other went into the sickening, helpless dive that betokened the death of the pilot. A wave of remorse struck Jack as he reflected that four men were dying for him. But he realized that he must act quickly in order to avoid their fate. It was up to him to reach America with his information, in order that the nest of guns might be wiped out.

The fatal dives of the two planes which had attempted to shield him gave Jack an idea. He let go of the controls and allowed his ship to go into a breath-taking nose-dive straight for the hungry waves. He knew that powerful telescopes and radio finders were following every move of his ship, and if he could convince the watchers that he was helpless, they would turn their attention to other planes.

Evidently the plan worked, for from the minute Jack began the dive, to the time he straightened out just in time to avoid striking the sea, he felt no more of the disconcerting warmth that warned of the presence of combustion rays. When he began to climb again he was out of range of the most powerful finder, and so safe from any but chance shots which could usually be avoided.

Within an hour from the time that Jack brought his ship to a safe landing at the American headquarters, the American officers had figured out the setting for the combustion guns, and completely destroyed the nest of guns Jack had found.

That night Jack again occupied the easy chair in the Potter parlor with Ann by his side. Professor Potter was with them this time, and the three were engaged in a discussion of the motives of the Martians in sending one of their satellites to our moon,

when they were again interrupted by the radio.

"The Lowell Observatory at Flagstaff, Arizona, announces," said the voice, "that Deimos, the small, outer moon of Mars has just left its primary and is headed, as nearly as can be determined, toward the Earth. Last night we discovered for the first time that the new companion of our moon is probably Phobos, a satellite of Mars, and it now appears that Deimos has gone to join its sister satellite."

The professor nodded his head gravely. "It is just what I expected. Last night Phobos approached very close to the surface of the moon and stopped just above the small crater below Ptolemy. It has remained there ever since. It is probable that the Martians found whatever it is they were looking for, and having found it, landed on the moon by means of rocket ships, or whatever it was they used in getting from their own planet to Phobos, and have now sent home for supplies or reinforcements."

"Phobos took two days getting here," said Jack, "so I suppose we can expect Deimos by Monday night."

The professor expressed his intention of watching for the arrival of the second satellite, so Monday night found the same three friends gathered in the observatory of Luther's College, waiting for the moon to rise. No sooner had it come within the field of view of the big refractor than the professor gazed into the eye-piece and uttered a sigh of disappointment.

"It is already there," he said, "so we shall not have the pleasure of witnessing its arrival."

Ann and Jack looked through the telescope, and saw a small black dot near the larger one which hovered below Ptolemy. For over an hour the

three watched, hoping to see some motion of one of the satellites, then, just as they had decided to abandon the vigil, Ann who was taking her turn at the instrument, uttered a cry of astonishment.

"Dad!" she cried. "It is growing! The little one is growing! It is almost as large as the other one already!"

Professor Potter took his place at the telescope.

"It is not growing," he said, after a brief silence. "It is moving toward the earth at a terrific rate of speed."

**B**EFORE the eyes of the three interested watchers Deimos grew until it completely eclipsed the moon. Then the speed of its growth slowly decreased until it finally ceased altogether. When it came to a stop, the professor declared that it must be nearly within the atmosphere of the Earth. The details of its surface could be faintly made out, and seemed to consist of rugged peaks and barren plains, much like the surface of our moon.

The three watched it for half an hour, but as nothing happened, and as the hour was growing late, they decided to return to the professor's house. They entered the door just in time to hear the radio announce what they already knew—that Deimos had come to rest within a hundred miles of the Earth's surface.

Scarcely had the announcement been completed, when a strange thing happened. No audible word came from the radio, yet all three listeners had a distinct sense of expectancy, a feeling that something was about to follow. So strong was this feeling that all three stood still, listening. Then simultaneously, in the minds of the three, words formed themselves: "This is a message from Mars," was

the thought that struck them all. And, in the message which followed, each one felt that he was thinking each sentence himself, yet all had a peculiar feeling that somehow or other, the words originated in the radio.

"We, the people of Mars," began the thought message, "feeling that life is no longer possible under the rigorous climatic conditions existing on that planet at present, have decided to emigrate to your planet. With that end in view we voyaged to our largest satellite and, after fitting it out with supplies and offensive weapons, took it to your moon by controlling the force of gravitational attraction. We have now erected a stronghold on your moon, and have brought to us our second satellite with more supplies, and a radio thought transmitter. It is with this that we are sending you this message.

"There are not very many of us, and one continent is all that we desire. We warn you that we have enough power in our stronghold on your moon to wipe out the whole human race, but if you will accede to our demands in peace, no one shall be injured. Our demand is that the whole continent of North America be evacuated within three months. After that period, anyone remaining in North America is our rightful prey. We give you a week to decide whether it shall be peaceful evacuation, or wholesale extermination. Your answer must be given by radio at noon on February twenty-second. Think carefully before you pit your meagre minds against our superior intelligence in a war which would inevitably lead to the entire devastation of your planet."

The three listeners in professor Potter's parlor gazed at each other in awe, fear of the unknown written on each countenance.

"Did you hear it, too?" asked Ann at last. "Did you hear that thought message, or am I going insane?"

"We heard it, Ann," Jack assured her. Then, as the significance of the message dawned on him, "It is just what we were wishing for the other day, Ann. But God! how foolish we were! A war to the death with people whose intelligence is great enough to harness the forces that keep the planets and their satellites in place, who can cross tremendous voids of space in two days, and who can send thought messages to a planet whose very speech must differ from theirs! I am afraid a war with Mars will be a greater catastrophe for this Earth than any mere war of the nations could be."

All over the face of the earth millions of people had received the thought message from Mars, and millions were thinking much the same thoughts that Jack had expressed. What a horrible thing would be a war with Mars! But how could it be avoided? Even if the inhabitants of North America were willing to tamely submit to being expelled from their homes, where could they go? Who would take them in? Where was there a place in crowded Europe, Asia, and South America for the millions that would be homeless if the demands of the Martians were acceded to?

Before the sun had risen again on America, the United States government had taken steps to communicate with the other great nations of the world, allies and enemies alike. By nightfall of the following day, the American proposal of a temporary truce and a convention of diplomats from all nations was in the hands of every power. At noon on February 18th hostilities ceased by mutual agreement, and the following day saw

the air filled with rocket ships carrying diplomats from all over the world to meet in Buenos Ayres, the place chosen as the site of the convention because of its position in a neutral country.

THE World Convention of the twentieth of February 1975 was one singularly short and smooth. There were no lengthy debates, no petty quarrels and no display of national hatred. All were agreed that the world should unite to prevent an invasion from Mars. The only points to settle were: under what sort of organization would the nations unite, what would be the method of defense, and how should the present disputes between hostile nations be settled? Before night all of these points were decided upon. The organization was to be a loose confederation with the Commander-in-Chief of the American army at its head. He was elected head because it was America that was chiefly being attacked and hence would be most ardent in defense, and because he had shown unusual ability in the short time America had been in the war. Combustion guns were to be the weapons used, as they were the only things whose range extended to the moon. And as for the disputes which had caused the war, it was decided to leave them until after the Martians had been repelled.

When the result of the convention was made known, the world applauded whole-heartedly. Everyone was sick of reading in the papers and hearing over the radio of millions of people burned to death by combustion guns, of air transport planes crashing to the earth with their loads of brave young men, of the horrible tortures one's enemy inflicted on spies, and of the thousand and one other horrors

of war. In their joy over the end of earthly war, they all but forgot the unknown horrors that were certain to be visited upon them by the inhabitants of another planet.

The few hours before noon of February twenty-second were spent in feverish manufacturing of more and better combustion guns, and in the organization of the confederation of the nations into a closely-knit, efficient unit. The wonders that were accomplished in the brief period allotted are indeed miraculous to recall, but when miracles are absolutely necessary, they usually happen.

Thus it happened that toward noon on the anniversary of the birth of the Father of America, millions of hearts beat with patriotic enthusiasm as they listened for the radio announcement that would plunge two planets into a deadly war. Shortly before noon, millions of hearts were chilled as the weird thought message of the Martians reached their minds.

"We are waiting for your answer!" was the brief but ominous sentence conveyed to the listeners by radio thought transmission.

"We, the people of this earth," boomed the voice of Commander-in-Chief Johnston, "demand that the Martians evacuate our moon and withdraw to their own planet. Under no conditions will we cede to them the continent of North America. This constitutes a declaration of war against Mars!"

Almost immediately the reply of the Martians came to the minds of the expectant listeners. "Prepare to die!" it said.

Simultaneously with this interchange of messages between the Martians and our earth, every available combustion gun on our planet was brought to bear upon Deimos, which

still hovered within a hundred miles of the earth's surface. Jack, whose lack of knowledge of the operation of combustion guns made him of little service in this branch of the war, was stationed as an observer at the telescope of Luther's College. He, in common with the other official observers throughout America, witnessed the unexpected success of the attack. In a surprisingly few minutes whole mountains took on a reddish tinge, and soon came tumbling into valleys, melting as they crashed to the level plains. The plains began to seethe and boil like huge pots of molasses candy, and before half an hour had passed, the side turned toward the earth had become a smooth surface of boiling lava.

Then, judging that all possible damage had been done to Deimos, General Johnston, Commander-in-Chief of the Allied Armies of the World, ordered that the guns be turned upon Phobos. Now the principle by which the combustion gun works is the electrical excitation of atoms, and their bombardment by electrons until heat is generated by the great increase in the speed of the atoms and in the number of collisions occurring. This electrical excitation and electronic bombardment is carried along two distinct rays by radio waves. The one disadvantage of the gun was the sharp focus necessary to produce an effect. Thus it happened that it was several hours before the combustion guns of the earth could get the range of the distant and comparatively small Phobos and focus their guns with the necessary accuracy. In the meantime, the Martians began their attack.

THE first warning the earth received, came from California. All along the western coast the horizon became suddenly violet. Then a violet



sheet seemed to drop from the sky and move swiftly toward the land. It moved with incredible velocity, reaching the shore within a few seconds from the time it was first observed. All along the western coast of North America the sheet extended with only one break of about seven or eight miles about in the middle, at latitude 42 degrees. Like the charge of irresistible cavalry the violet sheet swooped down upon the land, passing over it at the rate of nearly four hundred miles an hour. As it passed, the brain of every living thing it touched became unbalanced. All mankind was becoming insane at the rate of four hundred miles an hour! Madmen ran about the streets, stabbing and shooting their loved ones. Insane drivers drove at breakneck speed through mad throngs of shouting people. Mothers strangled their children. Mad dogs attacked full grown men. Mad men attacked dogs. The streets were filled with screaming, fighting men and women. No roof was too thick for the ray to penetrate. No wall strong enough to prevent its penetration. All within reach of that awful ray lost all power of reason and became worse than the wildest of beasts.

The world was first warned of the terrible fate that was swiftly overtaking it by the radio station at Goldbeach, Oregon. This town lay within the break in the violet sheet that stretched for about seven miles north of 42 degrees 30 minutes North latitude. Within this break in the wall of violet rays was immunity. No one who lived within this belt lost their reason.

Now it so happened that the Goldbeach radio station was relaying a program from another city which did not lie in the immune belt. Thus it happened that in the middle of a beautiful piece of music, the musicians

suddenly began to play wildly and discordantly. The announcer shouted into his microphone with mad enthusiasm.

"They're crazy!" he shouted. Then with a maniacal laugh, "I'm crazy! We're all crazy! The world is crazy! Ha! Ha! Ha!"

The Goldbeach announcer did not know what to make of the outbreak of his colleague or of the wild and unharmonious music the orchestra was playing, so he cut them off and began a profuse though somewhat confused apology to his audience. In the midst of his apology, one of the studio staff came running in shouting that half the town had gone mad. It seems that the line of demarcation between immunity and insanity ran through the center of Goldbeach, so that one half the town was losing its reason, while the other half remained normal.

With a quick comprehension of the situation, a vivid description was given by the announcer of the symptoms evinced by the victims of the violet rays, together with a description of its appearance, and an estimate of its speed. By telegraph and telephone inquiries it was soon learned how wide the immune belt was and just what latitude it lay in. This information was also relayed by the Goldbeach announcer.

An hour and a half later Malad City Idaho reported that it was undergoing the same fate as had Goldbeach. A check-up was thus obtained of both the speed of the violet ray, and the position of the immune belt.

Back in Medville, Massachusetts, Jack Newton was still engaged in observing the results of the combustion gun bombardment on the moon and the two satellites. Shortly after Commander-in-Chief Johnston ordered the guns to be trained on Phobos, Jack

noticed that Deimos suddenly moved to the west, at the same time retreating slightly from the earth. It came to rest at a point somewhere in the middle of the Pacific, and then began to move east again at the rate of about four hundred miles an hour. As it moved, Jack noticed that it became suddenly cloaked with a violet haze.

There was a radio in the observatory room, and it was turned on, so that if General Johnston wanted to give any commands by that means, Jack would hear them. So it was that Jack listened with interest to the report of the violet sheet which was descending over the country, bringing insanity with it, and to the account of the position of the immune belt. Shortly after the report from Malad City, Idaho, had been relayed all over the world, General Johnston commanded all available detachments of combustion guns to be moved into the immune belt which extended for seven miles north of forty-two degrees thirty minutes north latitude. At the same time he asked that everyone who could think of an explanation for this immune belt to send their ideas to him immediately.

Suddenly an idea struck Jack. He hurried to the telescope and brought the still moving Deimos into the field of view. After attaining as sharp a focus as possible, he at last made out what he sought. A faint violet streak was coming from the direction of the moon, and striking the side of Deimos which was turned in that direction. When it had struck, it seemed to spread out in all directions toward the earth, but leaving the spot directly beneath Deimos blank. This explained the immune belt. Deimos was being used as a spreader for the violet ray from the moon. It was like a huge watering cart, spraying the world,

but leaving a dry streak in the middle.

Jack telegraphed his discovery at once to the Commander-in-Chief and was rewarded by a word of congratulations from the general. He was told to remain on the job and to watch Phobos, because it was suspected that the ray originated from it. Probably Phobos was drawing power in some way from the moon, and throwing it in the form of a violet ray, on Deimos. Deimos then spread it out so that more territory was covered. If one link in that chain of horror could be destroyed, perhaps the world could yet be saved. The biggest chance lay in attacking Phobos inasmuch as Phobos was blocking the path to the spot on the moon where the Martians probably were situated, and as much harm as possible had already been done to Deimos.

Jack returned slowly from the telegraph office from which he had just sent the message to General Johnston. He wanted to see Ann, to talk to her. Sweet Ann! She was always so cheerful, so optimistic, so wholesome, and so sensible. But the Luther College Observatory was the only one in the United States that lay in the immune belt. Jack had seen almost at once that Medville and Boston would escape the insanity ray, and therefore it was important to keep a watcher at the big refractor at Luther's College. But surely he could spare a few moments to go and call on her.

With this end in mind, Jack turned in at Professor Potter's house and rang the bell. After a few moments, their maid answered the bell. Jack inquired for Ann.

"Miss Potter is out," said the maid. "And the Professor is asleep."

"Out?" queried Jack in disappointment. "When did she go out?"

"This noon. Just after you left for the observatory. A telegram came saying that her aunt was dying, and there was just time to catch the next plane for Chicago. She didn't have time to say goodby to you."

"Chicago!" gasped Jack. "And the professor is asleep while Ann is in Chicago!"

"Yes," returned the maid, looking at Jack as if she doubted his sanity. "The professor went to bed as soon as Ann left. You see he has the night shift at the observatory tonight, so he needed a rest."

"Then he doesn't know about the violet ray?"

"Violet ray?" asked the maid in astonishment. "What ray?"

Then Jack realized that the maid probably did not know how to run the radio, so that no one in the house was aware of the fact that the Martians were sweeping the earth with a ray causing insanity. The necessity for swift action suddenly came home to him. To the maid's vast astonishment, he sprang past her and ran up the steps two at a time, bursting into Professor Potter's room without the formality of knocking.

**T**HE professor had been awakened by the doorbell, and he turned an inquiring eye toward Jack as the latter entered. Quickly and as briefly as possible Jack explained about the violet ray that was bringing its horrible doom to the earth, and how Medville lay in the belt of immunity. Then, before the professor could say a word, he added: "I must save Ann if it's humanly possible. Maybe Chicago is in the belt of immunity. Quick, Professor, where can I find a map of the United States?"

"There is one on the wall of my library," said Professor Potter, who

was now fully awake, and hastily drawing on his clothes.

Jack ran downstairs again, and entered the library, turning on the radio and glancing at the clock as he did so. It was half past three, just one hour since the ray had passed over Malad City, Idaho. Seizing a ruler from the desk, Jack turned to the map. Breathlessly he measured the distance from the forty degree line to the position of Medville and the immune belt. Then, with beating heart, he applied the ruler to Chicago. Chicago was just twenty-five miles below the immune belt! Ann would be caught!

The professor entered the room just then, and Jack told him of his discovery. Scarcely had he finished speaking, when the voice of the radio was heard.

"The city of Wendover, Wyoming, announces that the fatal violet sheet has just been seen passing around the town. Most of the town escaped the horrible fate that overtakes everything the violet ray touches because it lies within the belt of immunity."

Jack turned to the map again before the radio voice had ceased. He sought and found Wendover on the map, and measured the distance to Chicago.

"Eight hundred miles!" he sobbed, "and every second the ray is getting nearer!" Then, with sudden determination: "Professor! Telegraph Ann to wait for me at the west end of the Chicago South Airport. I'm going to try to make it in your plane!"

The professor had not time to make a reply before Jack had dashed out of the house and hurried toward the hangar. Professor Potter owned a small, two-passenger monoplane which was capable of nearly four hundred miles an hour under the best conditions and with only the pilot in it.

Back in the early part of the century, this would have been considered a wonderful plane such as only the wealthiest man could own. But by 1975 such planes were owned by nearly every well-to-do man.

Jack saw that the gas tank was full, started the engine, and sprang into the pilot's seat. As he taxied out to face the wind, he saw the professor standing by the field, waving goodbye to him.

"Take my place at the telescope!" Jack shouted as he went past. "And don't forget that telegram to Ann!" Then he opened the throttle and the plane left the ground with a roar.

Chicago was just eight hundred miles from Medville by air. The plane could do a little better than four hundred at best, and the fatal violet sheet would doubtless reach Chicago in two hours. It was a race against time between the relentless sheet of violet, and the little, stream-lined monoplane.

Jack knew how nearly hopeless was the rescue he was planning, but it was impossible for him to sit still and know that the sweet, lovable Ann Potter was about to become insane. Up, up, and up, he climbed, till he was high above the usual lanes of traffic. Below him he could see planes coming from all directions, but all headed toward that narrow strip where lay safety from the Martian attack. Jack's was the only ship in sight that was not headed for the immune belt.

Jack drove with the throttle wide open, and with ears strained to hear the least sign of trouble in his engine. His sanity and the sanity of Ann depended on the perfect running of that engine. Should it sputter, should it miss, should it fail to attain its maximum speed, there was nothing to prevent the sweetest girl in the world

from becoming a raving maniac. But the engine ran smoothly and evenly, attaining the little over four hundred miles an hour that was to be expected of it under the most perfect conditions.

At half past four Jack was passing over the city of Erie, Pennsylvania. "Halfway!" he muttered grimly to himself. "And the ray should have reached Pierce, Nebraska, by now. It has five hundred miles to go, and I have four hundred. I can just make it, if all goes as it should!"

As the little clock on the panel before him began to approach the hour of five-thirty, Jack's figure became tense with suspense. Would he be in time? Would Ann be there? Would he be able to take off and gain full speed before the ray overtook them? At last he was able to make out the Chicago South Airport. A crowd of people were clustered around the east end of the field where a big five-motored plane was about to take off. Near the middle of the south end of the field was another crowd, gathered around a radio loud-speaker. At the west end Jack made out a lone figure which made his heart beat faster. It was Ann!

Jack zoomed over the heads of the crowd around the five-motored plane, skirted the crowd around the loud-speaker and taxied up to Ann. She ran toward him with outstretched arms as he jumped out to help her in.

"I knew you'd come, Jack. I wasn't worried a bit. But I got kind of lonesome as crowd after crowd left in those big planes. That is the last one over there, and murder is being committed for a place in it."

"Quick, Ann," said Jack, after a hurried embrace. "We haven't much time to waste."

Even as he spoke, the loud tones of

the big radio in the center of the field were heard. The crowd stood watching it with the glazed fascination of a bird watching a snake that is about to make it its victim.

"The violet ray has passed over Freeport, Illinois, leaving that town untouched because it lay within the immune belt. Freeport is a hundred miles west, and twenty-five miles north of Chicago."

"A hundred miles!" gasped Jack. "That means that we have only about ten minutes in which to gain our full speed, for the ray probably passed over Freeport about five minutes before that announcement was made."

**J**ACK placed Ann in her seat, and climbed into his own. As he did so, a crowd of men, maddened by the approaching danger to their minds, seized hold of the wings and rudder of the plane. Jack opened the throttle, and as most of the men were on one side, the plane turned around, facing the east end of the field where the pilot of the five-motored ship was still trying to get away. The men clung to Jack's plane with the strength born of desperation, but Jack headed straight for the other plane, and as his ship began to gather speed, one by one they dropped off, until, just as a crash seemed inevitable, his plane rose into the air and sailed over the heads of the crowd around the bigger ship.

High above the clouds Jack soared, gaining speed with altitude. Behind him the sky was already a deep violet, for the men on the ground had delayed him just enough to let the violet sheet almost catch him. Besides, the plane would not go so fast with two passengers as it could with one. Just as it seemed that the fatal violet would

engulf his plane, Jack leveled off and gave his engine every ounce of gas it would take. They began to gain perceptibly on the violet sheet.

Twenty-five miles north of them, Jack knew, was the immune belt. But he did not dare turn north until he had gained enough of a start on the violet sheet to make sure that it would not overtake them on the way. The most he could do was to edge gradually northward while most of the engine's power was expended in pulling them forward.

Just as Jack had decided that he had a safe enough margin to attempt a dash toward the north, his engine began to falter. It skipped, it began to run steady again, then it started to miss regularly. Perceptibly the violet sheet was creeping up on them. Jack looked at Ann. She smiled cheerfully at him in the face of the awful danger that both faced. Perhaps in a few minutes those pretty eyes would be lighted by the gleam of insanity, and those pretty arms would be outstretched to strangle him. Or perhaps he would seize her and throw her overboard, laughing in maniacal glee.

The picture his imagination painted was too horrible for Jack. He decided that quick death was better than that terrible fate from which escape seemed impossible. He told Ann of his decision, and she nodded bravely at him, though the death he had chosen was not an easy one.

He pulled back the control rod, sending the little monoplane, whose engine was now missing at regular intervals, into a straight nosedive for the earth far below. The tense faces of the young couple paled somewhat at the sight of the earth rushing up to meet them. Down, down, down, they fell, the wind whistling through the struts, and the plane gaining speed



with every second. At the last minute Jack, turning for a farewell to Ann, chanced to look behind. The violet sheet was gone!

Hastily pushing the control rod, Jack attempted to level off in his flight. He was a fraction of a second too late, the plane continuing to fall because of its great momentum even after it had been straightened out. It skimmed over the surface of a rough snow-covered field, until the wheels struck and the landing gear was stripped completely off. The plane slid along the ground for perhaps a hundred yards, finally striking a rock and turning up on its nose.

When the plane stopped abruptly, its nose buried in the snow and its tail in the air, both Jack and Ann were thrown free of it, landing, uninjured, in the soft, cool snow. Jack sprang to his feet almost immediately, and hurried to Ann's side. Ann's breath had been knocked out by the shock of the sudden landing, but she soon recovered with Jack's assistance, and the two began to look about them for a place of shelter.

It was now half past six, Eastern Standard time, and Jack figured that they must be about five or ten miles below Detroit. A few hundred yards to the right was a heavy clump of trees beyond which Ann thought she had glimpsed a house and road just before they crashed. Toward this, then, the two made their way.

The snow was deep, as the precipitation had been unusually large this year, but as there was a heavy crust about a foot beneath the surface, it was by no means difficult to walk. Ann's intuition turned out to be a correct one, for there was a farmhouse just beyond the trees and a well-plowed road led away from it toward Detroit.

From the farmhouse Jack telephoned the professor, telling him that his plane was wrecked.

"Never mind the plane," said Professor Potter impatiently. "Is my daughter all right?"

Jack assured him that she was, whereupon the professor breathed a sigh of relief, and told Jack that if the latter could get to the Detroit landing field, he felt sure he could borrow a plane in which to bring them home. Upon being asked, the farmer declared that he could furnish Jack with a ride to Detroit, so it was arranged that the three should meet at the landing field in an hour.

Ann was curious to know why the farmer and his family had remained in the danger zone when ten miles north lay a belt of immunity.

"Oh well," said the farmer with characteristic rural fatalism. "I figured that if God was going to let them Martians drive me crazy, I might as well submit. There's no use going against the will of God. And," he added with a slow smile, "it seems I was right after all. For I hear by the radio that they've just cooked the Martian machinery on Phobos with their combustion guns, so I'm not going to be driven nuts after all."

What the farmer said was true. The combustion gun officers had finally got the range of Phobos, and turned all available guns on it. The result was the almost immediate cessation of the violet ray, which led the Commander-in-Chief to believe that the Martian machinery for dispersing the ray on Phobos had been consumed by the flames. That the ray had ceased very opportunely for Jack and Ann we have already seen. But the damage that it had already done was beyond estimation.

Jack and Ann were driven to De-

troit by the hospitable farmer, and it was not long before the professor arrived in a borrowed plane. The three had a joyful reunion to which the news that Ann's aunt had died just after Ann reached her side added the only shadow.

Just after dark the three reached Medville, a Medville crowded with refugees who were just beginning to leave, after having been told a thousand times that all immediate danger from the violet ray was over. Jack was greeted on all sides with congratulations for his thrilling rescue, but he protested that he had done nothing wonderful, having merely done his best to protect from injury that which he treasured above anything else in the world.

**I**T might have been expected that the Martian attack was crippled for some time to come, but radio reports on the morning following Jack's rescue of Ann showed that the Martians were losing no time in following up their advantage. The reports came from the immune belt that stretched from Goldbeach, Oregon, almost to Detroit, Michigan. Up to this time the cities in this belt had experienced great difficulty in keeping off the madmen who had been driven insane by the violet ray. But now these cities reported that their insane neighbors were becoming more and more lethargic. And before noon, Eastern Standard time, the most western cities reported that all the victims of the violet ray had become completely paralyzed.

From then on, the progress of the paralyzing ray, as it was immediately named could be easily watched by the radio reports that came in from cities in the immune belt. The invisible ray, if ray it was, seemed to af-

fect only those that had been exposed to the violet ray, for the same belt remained immune, whereas Deimos did not repeat its transcontinental journey, remaining instead poised over Detroit, where it had been when the violet ray ceased. It traveled more slowly than had the Violet sheet, so that it was after eight before it reached Detroit.

Great was the anxiety and suspense of radio listeners that night as they waited to hear whether the strange paralyzing ray would continue on past Detroit, affecting those that had not been exposed to the violet ray. But as minute after minute flew by, and there were no further cases of paralysis people began to breathe more easily, and conversation turned to other topics.

About nine o'clock, Eastern Standard time, however, the radio again was the center of interest. Another weird thought message was being sent from Mars, and again, that feeling of icy terror came over each heart as the ominous words impressed themselves on the brain of the listener.

"We of Mars give you of America one last chance," said the message. "Two thirds of your countrymen now lie helpless and paralyzed, an easy prey for the cold winds and winter storms that are sweeping your nation. You have temporarily destroyed our violet ray generator, but we can rebuild it within a few hours. With that we can easily reduce the rest of you to hopeless insanity. We give you your choice. Will you evacuate your homes, leaving the victims of paralysis to the fate Nature gives them, or will you remain to become lunatics for the sake of an out-of-date patriotism? It is merely necessary to think your reply, for the language of

thought is universal, while the spoken language is merely local."

There was an interval of perhaps half an hour, during which General Johnston conferred with the officers of the combined armies of the world. After that time, he gave audible expression to the decision that had been arrived at.

"If you of Mars can read the thoughts of the people of this nation, which we do not believe to be possible without some special kind of radio thought-transmitter, we are sure that you have seen only defiance to your suggestion of surrender. We, the people of America, backed by the armies of the Confederate World, declare that we will resist to the end any attempt of the part of another planet to subjugate our Earth. We believe that we can destroy any machinery that may be erected on Phobos, Deimos, or our moon, and with that belief, we defy the Martians to conquer us."

"Idiots!" came the thought wave of the Martians. "You have given up your last chance of life! Henceforth expect no mercy from the men of Mars!"

Later that night, Jack, who was on night duty at the Luther's College observatory, thought he saw something leave the moon from the vicinity of Phobos and travel toward the Earth. But so swiftly did it move and so quickly was it gone that he could not be sure it was not an optical illusion. He debated whether he should communicate his experience to headquarters or not, but finally decided that his information was too slight and uncertain to be of any importance. And when the professor relieved him at his post about three o'clock, he neglected to mention the incident to him.

So it happened that the world was

much surprised to learn on the following morning that it had been visited by a Martian space-ship during the night. The ship was nearly five miles in diameter and shaped like a short, squat cone. It had settled squarely over the little town of North Hanover, Massachusetts, a neighboring village to Medville and had completely buried that village, no vestige of it being visible to the naked eye. In place of the quiet hamlet of North Hanover, there revealed itself to the surprised eyes of the inhabitants of Medville, a small, steel-covered mountain, perfectly symmetrical in shape, and perhaps three hundred feet high. This was the space-ship from Mars.

As soon as the news of the late arrival of a visitor from space was heard at headquarters, a squadron of combustion guns was trained on it, but for once, this method of attack failed. For three hours the guns concentrated on one spot, but upon investigation, it was found that that spot was not even warmed by the attack. It was suspected by the authorities that the Martians had found some ray to combat the combustion gun ray, and that that ray was being emitted by the space ship. There was, however, no visible sign of its presence.

As soon as the failure of the combustion guns was proven, every conceivable method of attack was used to destroy the Martian invader. Charges of T.N.T. and other high explosives were planted under its rim, for the edge of the steel mountain extended only a foot or two beneath the surface of the ground, but they were exploded with no noticeable effect on the ship. The largest guns in existence were brought to bear on it, but their shells and hard steel bullets were unable to penetrate the surface. Acetylene torches were used in an attempt

to cut through the metal exterior, but they had no effect on the hardened metal.

**D**URING all these attacks, which occupied the greater part of two days, no sign of life was noticed on the giant space ship. But late in the afternoon of the second day it was discovered by an airplane bomber that the peak, instead of ending in a point as had been supposed, ended in a hole about fifty feet in diameter. Six courageous men thereupon volunteered to undertake the task of climbing to the top and throwing bombs into the interior if possible.

Accordingly, on the morning of the third day, which was the twenty-sixth of February, six men started the hazardous climb up the smooth metal sides of the visitor from Mars. It took them an hour and a half to reach the top, and they were followed all the way through many pairs of powerful field glasses and telescopes. Then it was; that the presence of life made itself apparent for the first time on the space-ship. For no sooner did the six men reach the peak, than the three foremost were seized by long, slender tenacles, and dragged out of sight into the interior of the iron monster. The three others attempted at the last moment to throw some of their bombs, but they were seized with a paralytic stroke in the midst of their movements and collapsed on the side of the artificial mountain. They slid helplessly to the bottom, and two of them were killed by bumping their heads against the side before they reached the bottom. The third never recovered from his paralysis, but there is no doubt that he had glimpsed the grotesque creatures that had come to our Earth from the planet Mars.

That afternoon there began that

strange hammering, rumbling, and grinding noise in the interior of the Martian monster that was to last for the remainder of its existence on our earth. It sounded sometimes like a crew of carpenters at work on a house, sometimes like a steam dynamo going at full speed, sometimes like a compressed air drill, or a riveting machine, and sometimes like a boiler factory working at full blast. Through day and night the noise continued without a single let-down or stop, until that eventful day when it ceased—to be heard no more.

That afternoon also saw the beginning and end of our aerial attack on the metal mountain. Several bombing planes were sent up one by one, in an attempt to drop bombs down the opening at the peak. The first one missed its mark, and after that, each plane reported that the opening closed, as soon as it became visible in their finders. The fifth plane went into a nose-dive just after it passed over the mouth of the Martian monster, and crashed to the ground, killing the pilot. When the sixth and seventh did the same thing, it was decided that the Martians were killing the pilots with an invisible ray, and it was therefore necessary to abandon this method of attack.

During the next two days, twelve combustion guns and six powerful cannons concentrated in an attack on one spot about six feet square. The combustion guns kept their rays trained on that spot while the cannon sent shell after shell into the hard surface at close range. But at the end of that time, only a slight dent in the metal, and a few scratches on the surface were visible as a result of the bombardment. In the meantime other cannons had concentrated on digging huge excavations under the rim of the

mountain, by exploding shells close beside it. But when the snow had been melted away by combustion guns, and the holes dug by cannon, they were found to be of no use, for as soon as anyone attempted to enter them, they were struck down with paralysis, and never recovered. Bombs were then thrown under the rim, but for some reason or other they never exploded. Evidently the Martians were prepared for anything.

Up to this time the Martians had made no offensive move, contenting themselves with defending their space ship against attacks by the Earth. It was on the night of the twenty-eighth of February that they made their first hostile move. At about nine o'clock that night, a small metal cylinder, about ten feet in diameter and fifteen feet high, suddenly shot out of the opening in the peak of the metal mountain, and sailed swiftly to the village of Medville. It landed in the center of the brightly lighted square of Medville's business section, and a door opened in one side of it.

Out of the door there crawled five of the weirdest creatures ever imagined by the human mind in the wildest of opium dreams. They resembled somewhat huge green spiders in that they consisted of green balls about the size of medicine balls, from which protruded six appendages, three on each side. These appendages were long, tenacle-like arms, ending in well-formed hands. The creatures walked on the palms of their hands, and it was evident that they were not very used to walking at all. At one end of the green ball which formed the major part of their bodies was a grotesque little head with a high forehead, small, reddish eyes, without lashes, a widespread nose with large nostrils, and a little pouting mouth

from which protruded a single, slender fang, needle-like in sharpness.

These strange creatures crawled out of their cylindrical carrier in the middle of Medville Square and stood quietly in the middle of the street. It was not long before a crowd of curious passersby had gathered around them, put off their guard because of the lazy attitude of the spider-men, who stood perfectly motionless in front of their ship.

When a sufficiently large crowd had gathered, it became evident what the purpose of the creatures was. Suddenly nearly a dozen women from among the watchers began to move nearer the spider-men, drawn by a will more powerful than their own. Their faces expressed dazed horror, but not a sound did they utter as they drew closer and closer to the ship. At length they entered the narrow door, and were lost to the view of the horrified onlookers.

Just as another dozen was about to follow the first, several of the male watchers recovered their wits.

"Shoot them!" yelled several. "They are hypnotizing the women! Kill them! Shoot them!"

But no one had anything to shoot with, there being a law against carrying weapons. So as the Martians retreated slowly into their ship, a dozen more women followed them, and several men who attempted to keep them back by force, were struck down by the mysterious paralyzing ray which seemed to come this time from the little cylindrical ship itself. As the last of the hypnotized women entered the metal vessel, the door closed silently, the cylinder left the ground and sailed back toward the great Martian space ship, where it was later seen to enter, dropping swiftly into the opening at the top.



THE world was horrified at the latest outrage perpetrated by the Martians. What could they want with human women, these spider-men of Mars? To what purpose did they put them in that noisy, factory-like spaceship of theirs? Why could not their ship be destroyed? The morning paper contained a thousand and one plans for destroying the metal monster, but all of them were impractical. It seemed that all the world could do was to sit by and watch while the Martians did just as they pleased. The only protective measure that could be instituted was to keep guns trained on the opening from whence had come the cylinder in the hope that it could be hit if it should come forth in the same manner again. But it was very doubtful, to say the least, that any gunner could hit such a swiftly moving target.

That night Jack and Ann were discussing the different suggestions for conquering the Martians. On the following morning Jack was to attempt to drop a gas bomb down the opening in the metal mountain from a rocket ship so high up as to be unnoticeable to the Martians. Jack was chosen for the task because of his expert handling of his ship in the scouting expedition to England. He had been practicing hitting targets from great heights all day, and was rather tired by nightfall.

"The danger will not be great," he was assuring Ann, "because the Martians cannot possibly be aware of the fact that I am coming, and will therefore have no time to turn on their deadly ray. It is for this reason that it is so essential that I do not miss, for there can be only one trial. The Martians would be on the look-out for a second attempt if the first one failed."

"But, Jack," said Ann sorrowfully, "must you kill all those poor women that the Martians captured last night? Isn't there some way to kill the Martians without hurting them?"

"I'm afraid not," Jack replied grimly. "It is necessary that they sacrifice themselves for the safety of the rest of the world. I'm sure they would be willing to do it, if they had their choice. And, besides, they may be dead already for all we know. Anyway, I'd rather not discuss it."

"If there was only some other way of getting into that shell besides through the hole in the top! But every time men are sent through one of the excavations the cannon dig, they are paralyzed by the Martian rays. That proves that the Martians must be just inside the rim of the mountain, and that they are on the watch. If you could only get under that rim without their knowing you were coming, perhaps you could rescue the women and plant your gas bomb in safety."

"Perhaps we could do that very thing!" said Jack suddenly, a gleam of excitement lighting his eyes. "Probably you don't know it, but there is an old overflow drain pipe that used to be used as an overflow for the North Hanover reservoir before the town got big enough to use all the water that flowed into its reservoir. It runs from the reservoir, through the center of the town, out to the Medville poorhouse, where it was employed to irrigate the poorhouse garden. There is an open space of nearly a mile's length into which the swampy lands of the farms around it can drain. That drain pipe is nearly six feet in diameter and there are manholes opening from it into the main street of North Hanover, which is beneath the space ship. It no longer has any water in it, and there is no reason why a

small band of men could not walk through it and get under the space ship without being discovered, provided that the open stretch can be found, for it must be buried beneath six feet of snow by now."

"How do you happen to know so much about this drain pipe?" demanded Ann with curiosity.

Jack laughed. "Oh, I used to play in it when I was a kid. The gang of us would always beat it into that pipe whenever some farmer caught us stealing his apples. The farmers would seldom chase us in there because it was pitch dark, and we used to put logs and things in the way for them to trip over. We had little shelves along the side where we used to keep candles and flashlights and things. I dare say the kids in the neighborhood do the same thing now."

"And how would you go about rescuing the women if you could get in undiscovered?" inquired Ann.

"I can't tell about that without knowing the conditions existing under that shell," said Jack. "But I'd take along a thin periscope and put it through the hole in the cover of the first manhole I came to, which would be the one on Lake Street, I believe. I'd bring along a good assortment of bombs, and perhaps a machine gun, and after I'd seen how the land lay, I'd sally forth to the rescue of the fair ladies."

"Can it really be done?" Ann asked pleadingly. "And if it can, won't you try to get General Johnston to adopt your plan rather than throwing a gas bomb into the space ship while all those women are in it?"

Jack thought awhile, and finally shook his head. "I don't think I'd better tell him," he said seriously. "Because I'm sure he'd want to try the gas bomb first. You see, if I drop a gas

bomb, it means the risk of only one life, my own, and the risk to me is not very great at that. But if I was to lead a band of men through that pipe, it would mean a great risk to many men. Besides, the first method has a greater chance for success than the second. It is comparatively easy to drop a bomb on an unsuspecting enemy, but it is very difficult, probably impossible, to rescue a large number of people from the very stronghold of the enemy. No, I'm afraid our drain-pipe scheme is incapable of being carried through."

Ann again reminded him of all the human beings that would probably be killed along with the Martians if he insisted on dropping a gas bomb through the opening in the space ship, but Jack would not be persuaded. He was sure that it was his duty to do his best to drop that bomb, and he was determined to do it, even though he had to oppose his own sweetheart to accomplish his purpose. Jack and Ann were nearer to a quarrel that night than they had ever been before in the history of their acquaintance.

**E**ARLY the next morning Jack arose, and started for the professor's house, intending to bid farewell to Ann, for he was unwilling to part from her in anger on such a dangerous mission. When he reached the house, Professor Potter was already up, and waiting to wish Jack good luck on his bombing expedition, but Ann was nowhere in sight.

"I have just sent the maid up to call her," said the professor. "Doubtless she overslept."

The professor and Jack were engaged in a discussion of Jack's chance of hitting his target, when the maid came running down the stairs, her face white with fear.

"Ann isn't there!" she said in a voice full of terror. "And the bed hasn't been slept in, and the French windows leading onto the little balcony are wide open!"

Jack and the professor ran up the stairs, to find that everything was as the maid had reported it. There was no sign of Ann, the bed had not been slept in, and the French windows were open. Jack went out upon the little balcony, swung over the railing, and dropped to the ground. A brief examination of the ground revealed a round imprint in the grass, as if a heavy object about ten feet in diameter had rested there.

"The Martians!" cried Jack in horror. "The print is just the size of their cylindrical ship. They must have got her before she went to bed last night. Probably they left their ship here while one of them entered her room and hypnotized her. When they had brought her to the balcony, they made their ship leave the ground and took her aboard. Quick! Rouse the neighbors! See how many more they got!"

The alarm was quickly spread through the town, and it was soon discovered that the Martians had taken a terrible toll in the silence of the night. Many were the women that were missing, and many the families that grieved for lost daughters and sisters. But nowhere throughout the town could there be found a single person who had heard a suspicious noise, or seen the Martian ship. Everything had been done in silence and invisibly.

Jack hastened to military headquarters, for it was nearly time for his projected flight, and he was determined to do his duty no matter how his private affairs might conflict with it. At headquarters he inquired whether the cylindrical Martian ship

had been seen leaving the metal spaceship last night, but he was assured that although a watch had been kept continuously, no sign of the ship had been visible, either leaving or returning. Hence it seemed evident that the Martians were capable of making their ship invisible if they so desired.

It was a pale and silent pilot that climbed into the rocket ship on that eventful day in early March 1975. Jack's face was grim and his teeth clenched as he inspected his instruments to see that everything was ready for the start. He would teach those Martians a lesson! Did they think they could capture Ann, and go unpunished for it? He would kill them all! Not a one would escape!

There was a loud roar of exploding rockets, and the ship left the ground and shot high into the air. Higher and higher it rose, with Jack still muttering to himself, half mad with anger toward the Martians and despair over the loss of Ann. At last it attained the greatest altitude Jack could stand with his present equipment, so he leveled off and began the silent glide that would carry him directly over the huge Martian space ship at a height so great as to be invisible to them.

The bombers of that day were somewhat different from those of the earlier part of the century. Instead of two men being necessary, one to pilot the ship and one to release the bomb, the whole operation was done by the pilot. He had a sort of periscope arrangement into which he looked when he desired to see the ground beneath him, and with this he aimed. The bomb was released by pressing a pedal with one foot.

Jack sailed on, a tiny speck in the blue void for those who knew just where to look. He gritted his teeth, and stared straight into the periscope,

keeping his foot ready over the releasing pedal. The periscope was set so that the instant the metal mountain came into the field of vision, Jack was to press the pedal, releasing the gas bomb that was to bring death to the Martians.

Death to the Martians! The phrase rang through Jack's head like a battlecry, rejoicing his heart. He would be responsible for their deaths, and he would be personally revenged for the abduction of Ann! Then suddenly, like a cold wave over his warm emotions, there came the picture of Ann, dying of asphyxiation from the bomb her lover had thrown! How could he kill her, that sweet, good-natured Ann? His dreams would be haunted forever after by a vision of her beautiful figure convulsed in the agonies of death, gasping for the pure air that he had poisoned for her.

Far up in the blue dome of heaven that tiny speck sailed on, and inside the plane, within the mind of the pilot, a terrible battle was being fought, an age-old conflict, the conflict between love and duty. The Martians must be killed! But Ann must be saved! This is our last chance against the Martians! But Ann is beautiful, so beautiful, and I love her! But what is one girl, or even many girls, balanced against the safety of the world? But I cannot live without Ann. And am I unwilling to sacrifice myself for my country and my race? Oh, but there must be some other way! There is no other way!

Yes! One other way! The drain pipe! Just as the thought struck Jack, the metal space ship of the Martians came into his field of view. He made one last effort to press the releasing pedal, but checked himself just in time. And as the opportunity for releasing the bomb passed, a surge

of relief swept over Jack. Love had won the battle! He would make an attempt to rescue Ann through the drain pipe, before he resorted to gas bombs to kill the Martians.

It was in vain that Jack's reason attempted to convince him that Ann was not alive, that the attempt to rescue her through the drain-pipe was foolhardy nonsense, and that the General would not let him make the attempt anyway. Love would have it that Ann was still alive, and uninjured, that she could easily be rescued, and that the General would be glad to find a way to kill the Martians without harming the prisoners they had taken.

Jack banked his plane, made a wide circle and returned to headquarters. Here he was met by a volley of questions.

"What happened? Didn't the release catch work? Periscope go wrong? See the target too late? We didn't see or hear any sign of a bomb. Do you suppose it could have fallen too fast to be visible? Or could the Martians have disintegrated it? Did you get cold feet on account of the women?"

"No," replied Jack in answer to the last question. "I just happened to think of a way to save them, so that it may not be necessary for them to die. Where's the General?"

**J**ACK soon attained admittance to the General's headquarters, where he was at first sternly reprimanded for disobeying orders, but when the officers had heard his plan for rescuing the prisoners of the Martians, they were inclined to be more lenient, some even commending him for using his head to prevent useless sacrifice of lives. Jack urged his drain-pipe scheme on the general and his staff

with great eloquence. He argued that at most it involved the risk of only a dozen or so of men, and that it might mean the rescue of all the inhabitants of North Hanover, although it was not very likely that they were still alive. If the plan failed, the bomb-dropping scheme could still be tried, for Jack was sure that the Martians had not caught sight of him as he swooped above their space-ship.

To Jack's great joy, permission was at last granted him to try his scheme, leading a band of men chosen by himself from the Medville Volunteers Corps. When Jack had lined up this famous band, and after explaining his plan to them, had called for volunteers to go with him, many were the brothers who had lost sisters, and many the lovers who had lost sweethearts that stepped forward, eager for a chance to be avenged for the abduction of their loved ones. From the many who volunteered Jack chose twelve whom he thought would be the bravest in the face of great danger, and among them were many who had played in the drain pipe with Jack when they were children and consequently knew well every turn of the pipe.

Jack stopped only long enough to see that a digging machine was loaded on a big transport plane and to procure a small periscope, then he and his men equipped themselves with bombs, revolvers, a machine gun, and a small combustion ray machine, and started for the drain pipe in planes. Jack stopped at Medville and picked up a small boy who lived next door to Ann, and who, Jack knew, was familiar with the drain pipe. The boy guided Jack to a spot in a broad, snow-covered field beneath which he was sure lay the opening to the drain pipe.

The plane containing Jack's band of men and the digging machine fol-

lowed his lead, and landed near him. The boy pointed out the exact location of the opening beneath the snow, and the digging machine was at once set to work at that point. It was not three minutes before the little machine had unburied the entrance to the tunnel, thus corroborating the youngster's knowledge of the spot.

As soon as the hole was large enough to admit his men, Jack sent his neighbor's boy home, much to the little fellow's disappointment, and led the way into the inky darkness. Each of the men had a flashlight which he turned on as soon as he entered. Jack's orders were absolute silence, and his men were to turn off their flashlights as soon as they saw his go off.

For a mile and a half the men plodded on, no sound being heard but that of soft footfalls on the hard concrete surface, and the panting of those who carried the machine gun and combustion ray machine.

When Jack thought that they had gone far enough to be under the rim of the space ship, he turned off his flashlight, lest it should be dark in the interior of the space ship and the light from the flashlights, coming through the manholes, should betray them. He paused to give his men a breathing spell, then continued more slowly, taking care to make no sound.

After what seemed an eternity of stealing through inky darkness, Jack was rewarded by seeing a gleam of light ahead. Evidently the Martians had illuminated the underside of their space ship. Jack crept cautiously forward until he reached the little alcove that always betokens the presence of a manhole. Into this he crawled, and climbed up until he could reach the manhole cover. Very slowly, and being careful not to make the slightest sound, Jack slipped one end of his



periscope through the hole in the center of the manhole cover. As soon as it was in position, he looked through the eye-piece, turning it slowly to take in all his surroundings.

THE sight that met Jack's eyes was that of an ordinary country village dimly lighted by a sheet of luminous metal which spread above it, seemingly resting on the roofs of the taller houses, and crushing the steeple of the only church in view. As he turned the periscope, the thing that struck Jack most forcibly was the utter absence of motion. There was a continual noise of hammering, and buzzing coming from above the metal curtain, but below it all was still. No breeze moved through the trees, no curtain stirred in any window. Not a person was visible.

Just as Jack had nearly completed the circle of vision through the periscope, something came into view which caused his heart to beat madly. Ann! She was seated on a bench beside the road, apparently asleep. But even as Jack looked, she opened her eyes and stared directly at the periscope. Jack wiggled it quickly back and forth, and was rewarded by seeing Ann spring to her feet and start toward him. Then she seemed to recollect herself, stopped, and after looking carefully around her, proceeded toward the manhole, walking in a careless, aimless way that was calculated to allay suspicion.

Ann stopped beside the manhole, and looking off into the distance, said in a low voice, "Is that you, Jack?"

Jack replied that it was, indeed, he, and asked her how she happened to be in that spot.

"I thought you might come," she said simply, "because you mentioned this manhole when you talked with

me last night. I thought you might think better of dropping gas bombs down here if I were here," and she smiled slightly.

"But don't the Martians keep you locked up? What do they want with you anyway?"

A look of terror came over Ann's face. "It's too terrible to discuss, Jack," she said. "They eat us. They paralyze their victim first then they stick that horrible fang of theirs into her throat, and suck her blood."

"But why choose only women?"

"It's merely that they can capture women more easily. Their hypnotism apparently has no power over men. But they have paralyzed this whole town, and they seem to prefer to drink the blood of women anyway. They have neither eaten nor even paralyzed any of the women they captured on either raid yet. It is our opinion that paralyzing them must spoil the flavor for them somehow, for they seem to want to keep us without paralyzing us as long as possible, while they eat up the paralyzed women first. Occasionally they also eat a man."

"Where are their headquarters?" asked Jack, seeing that Ann was loath to talk any more on such a horrible and disgusting topic.

"Above the metal ceiling," said Ann pointing upward. "There is apparently a whole colony up there, and the whole thing is a huge factory. But no one who has ever gone up there has ever returned. The place where they come down is about a mile north of here, near the center of the town. They have sentinel boxes spaced all around the inside of the rim about a quarter of a mile apart, and there is a paralyzing ray gun in each one. But the guns cannot be detached from the boxes, so the spider men are almost helpless when alone, for they carry

no weapons. One of the women almost killed one when she attacked it from behind about an hour ago, but he finally succeeded in choking her to death."

"What do you think would be the best method of attack?" asked Jack, eager to get at the Martians.

"I don't think you'd better attack at all," was the surprising answer. "I can round up the free women within half an hour, and get them to walk toward this manhole. We can rescue them easily unless something unforeseen happens, and there is no use trying to rescue the inhabitants of the town as they are all hopelessly paralyzed. The only difficulty is that there are always a few spider men roaming around, eating between meals so to speak. If they should happen to notice the generally exodus of all women in this direction, we might be out of luck. I'll tell them to walk alone and to pretend to be going nowhere in particular."

Jack and his men did not like this plan, in which they were to take such a passive part, very well, but as they had nothing better to offer, they gave a grudging consent to it, and sat by to wait. It was not five minutes before the first woman arrived, reporting all going well. Jack took off the cover, climbed out into the street, and lowered the woman through the manhole. It was decided that for safety's sake, Jack would have to redescend into the hole and replace the cover each time, so that if a Martian chanced to pass, he would see nothing wrong.

But soon the women began to come in such thick numbers, that Jack left the cover off and stayed outside to help them into the hole as they came. All went well until all but six of the women had been rescued. These six had last been seen entering a house

quite near the entrance to the main part of the Martian space ship, above the metal sheet. Ann had gone on to send them to the manhole, but she sent back word that if she did not return in ten minutes, they were to go on without her, as there were several spider men in the vicinity.

The ten minutes were not quite up before Jack and five other men decided to go in search of Ann and the other six women. Two men were detailed to lead the women back to safety, while the other five were to guard the entrance to the manhole and be ready to fling off the cover to admit Jack and his men at any moment. Those that accompanied Jack were armed only with revolvers and a few hand grenades, the bombs, machine gun, and combustion ray machine being left in charge of those who remained at the manhole.

ALL went well with Jack and his little band until they reached the square or business section of North Hanover. Up to this time they saw no sign of life anywhere, either of Martians or Earth dwellers. The only living beings they saw were a few paralyzed inhabitants of the village who lay where they had fallen on doorsteps, street corners and front lawns. Nowhere were there any women.

Just as they were about to enter the square, Jack noticed a manhole in the middle of the street and decided that it would be well to prepare it for use to retreat to in case of emergency. Accordingly the cover was taken off and one of the men left inside as a guard. Jack went on with the other four, searching for Ann.

Jack and his four companions went on until they heard the sound of screams coming from a house nearby.

With one accord the five ran to the house, entering the front door with drawn revolvers. The scream was repeated again as they entered, coming from a room at their right. They turned to the right and came upon the six women they were looking for held by hypnotism by fear of the frightful spider-like Martians. Behind the women stood Ann, looking the other way to prevent being hypnotised. She it was who had screamed, on the chance that Jack and his men might be near, looking for her.

As the five men entered, the Martians wheeled to face them, receiving a bullet in the head from each of the men as they did so. The spider men dropped dead at once, and the six women recovered their minds, hastening to join the men.

Jack led the way out and toward the manhole, not even stopping to embrace his recovered sweetheart. But before they had reached the manhole in the square, a horde of Martians, alarmed by the shooting, came crawling down the ladder-like structure that connected the town with the main room of the space ship above the metal ceiling. Catching sight of Jack and his men, they set up a weird, wavering shriek that penetrated one's eardrums like the siren of a fire engine.

"Cover your ears!" shouted Ann, suiting the action to the words. "That shriek will render you helpless in no time!"

Two of the men did as Ann suggested, but the other three of which Jack was one, threw hand grenades into the oncoming horde. The resulting explosions killed many of the spidersmen and put an effectual stop to the disconcerting shrieks. But reinforcements were pouring in continually from behind, and the ever-increasing army of Martians came nearer and

nearer to the fleeing group of Earth dwellers.

Before they had reached the manhole, all the hand grenades but one had been thrown, and Jack reserved that one for their last stand. As they approached the manhole, the man whom they had left in charge, threw off the lid, and waited for them. Jack and three other men faced around and met the oncoming Martians with revolvers. The other member of their group lowered the women one by one to the man inside, who placed them on the floor of the drain-pipe.

When all the women had been safely placed in the drain pipe, Jack ordered the men to enter it one by one. They did so reluctantly, each one emptying his revolver at the Martians before he left his captain. Jack waited until the last possible moment, then throwing his hand grenade, he turned and leaped into the manhole, pulling the lid after him.

"Go on, men!" he shouted, hanging to the lid by his hands. "Get the women to safety! Hurry them through the tube as fast as you can, and don't any of you wait for me! I'll join you as soon as I can, but I've got to keep these Martians out to the last minute. Now hurry, and don't let me see anyone lag behind!"

The men obeyed him with the punctuality born of military discipline, but it was hard for them to convince Ann that she ought to go. At last they had to take her by force, until Jack pleaded with her and pointed out that she was endangering the lives of them all.

Jack clung to the manhole cover till his fingers became numb. The Martians hooted and howled above him in their weird way, clawing at the cover with many long fingers. At last several of them got a good grip on it and

began to pull upward. Jack braced himself by hooking his toes under some protruding bricks and held on. The Martians heaved upward once, twice, three times. Jack felt that he was being pulled apart. His arms were aching, and his fingers no longer had any feeling in them. The Martians gave one last pull, and Jack was wrenched loose from the lid, falling to the floor of the manhole.

As he fell, Jack reached for his revolver, and pulling it out, killed the first three Martians that stuck their ugly heads into the manhole. As they fell to the floor, Jack turned and raced in the direction taken by the others. He had not gone half a mile before he heard the pattering of soft palms on the concrete behind him. Evidently the Martians could move quite swiftly when it was necessary, and possibly, too, they could see in the dark.

Jack ran on until it seemed to him that the long slender arms with their delicate fingers were almost upon him. Then he turned, and throwing the beam from his flashlight straight into the eyes of the nearest Martian, he used up his last shot killing him.

He clubbed two more over the head with the butt end of his revolver, and turned and sprinted for the next manhole which he knew must be quite near. Up this he climbed, throwing off the cover and jumping out into the open air. Then he set off at a run for the Lake Street manhole where he knew his band was waiting for him. He could make better time on the surface than he could in the pipe, and it was essential that he get there ahead of the Martians, for he must warn his friends that they were coming.

Jack's trick of leaving the drainpipe for the open ground caused some delay to his pursuers as he had hoped it would, for they could not decide

whether to chase him above ground or go on through the pipe in search of the other captives who they were sure had not gone above ground. At last part of them climbed out after Jack and the rest continued through the tube.

Jack reached the Lake Street manhole just in time, for his pursuers were close behind him. He was received into the manhole by his companions, and the few Martians who had chased him were quickly disposed of by turning the machine gun on them.

**H**ARDLY had the last one been killed, when the first of the party of women that Jack had sent through the drain pipe began to arrive. They were much surprised to see their savior here ahead of them, for it had been the private opinion of many of them that he would never be seen alive again. When Jack explained to them that he had come above ground from the last manhole and that an army of Martians was close behind them, they hurried through, and allowed Jack and his men to set the machine gun in place, commanding the drain pipe.

They were none too soon, for hardly had the last man passed beyond the manhole and the machine gun been set up when the Martians began to arrive only to be mowed down as they came by the machine gun. Meanwhile some of the men were trying to get the combustion ray machine to operate. The power used by this machine was furnished by a small but powerful gasoline. It was this engine that they were having difficulty in starting. At last, however, it gave a few puffs and began to run in a jerky, irregular fashion.

The Martians continued to arrive

in an endless stream, and the machine gun continued to turn them into lifeless carcasses, nearly choking the tube. The number of ammunition belts for the machine gun was small, and before the gasoline dynamo for the combustion ray machine could be made to operate smoothly, all the ammunition belts were used up. But the dead bodies of the spider men had now so completely filled the drain-pipe that the Martians could only climb over one by one. It was easy therefore, when the machine gun ceased for lack of ammunition, to pick them off with a revolver as they came.

The Martians, realizing that the deadly machine gun was now out of commission, paused and began to systematically clear away the barrier of dead bodies. They had accomplished this feat with amazing speed, and were beginning to charge on the little band of heroes in too great numbers to be shot down with revolvers, when the motor went into smooth action, and the combustion ray was turned on them.

The effect of the combustion ray on the little spider men was indeed remarkable. They seemed to catch fire like a spider in a candle flame, and shrivel away to nothingness. In less time than it takes to tell it, there was no visible trace of a live Martian in sight, the only traces of the huge army being an endless line of small, withered bodies which crumbled, when touched, like a pile of ashes.

Emboldened by the apparently complete annihilation of their enemy, Jack and his men climbed out of the manhole, and threw all their gas bombs as far from the manhole as they could. Then they returned quickly into the drain pipe, put the lid back in place, and blocked up the hole in the center with a strip of cloth. Then

donning their gas masks, they marched hurriedly out of the drain pipe.

As soon as they reached the little encampment at the opening of the drain pipe, Jack had an airplane blow a strong breeze from its propeller back through the pipe, in order that any gas that might be escaping that way would be forced back into the city. Then the hole was blocked up as solidly as possible, and the little party of rescued and rescuers returned to headquarters, where Jack was complimented on the success of his venture.

To make assurance doubly sure, Jack was sent up in a rocket plane almost at once, and succeeded in dropping a very powerful gas bomb through the opening in the top of the Martians space ship. From that time on, no sound was heard from the interior of the ship except a steady throbbing which finally ceased, and which was probably caused by some engine running without an attendant. Many days later, when the interior of the space ship was thoroughly explored, it was found to contain a multitude of weird machines in all stages of construction, whose purposes could be only vaguely guessed by expert engineers, but all agreed that the machines, when operated correctly would manufacture many different kinds of rays, all of which would be destructive to human life. The space ship was a huge factory bent on manufacturing enough ray machines to destroy every particle of life on this planet.

Later on the night of the same day that Jack and his band rescued the prisoners of the Martians and destroyed the invaders with poison gas the final act of the drama that involved two worlds was played. Jack was observing unofficially at the big



refractor in the Luther's College observatory. He was looking at the moon, for he had an intuition that the Martians would be swift to avenge the death of their comrades.

He had not long to wait, for hardly had he obtained a good setting when Phobos moved slowly to one side, disclosing the small crater below Ptolemy to view for the first time since Phobos had taken up its position above the surface of the moon. Excited by this discovery, Jack watched keenly for further developments. Suddenly he glimpsed two swiftly moving shadows which darted toward the Earth with the same incredible speed that had marked the flight of the one he had seen on the night before the Martian Space ship landed. Without doubt the Martians were sending more giant space ships to attack the world!

Even as the thought raced through Jack's head, there came a terrific shaking as if the whole world had turned on its side. The floor of the observatory seemed to rise up and shake itself like a dog coming out of the water. Jack was thrown out of his seat by the shock, but he jumped up at once, and with a vague idea of seeing if the telescope was broken, he gazed through the instrument immediately. The sight that met his astounded gaze was enough to make him doubt his sanity. Before him was a miniature world, exactly identical in every respect with the Earth on which he lived, even down to the little yellow moon beside it. And even as he looked, the Earth with its satellite dwindled away into nothingness, quite as if it was receding at a terrific speed.

**J**ACK rubbed his eyes in amazement and attempted to find some other object with the instrument, but sud-

denly he noticed that the field was illuminated as brightly as it ever was in the daytime. Gazing around him with rapidly increasing wonder, he saw that the sun was shining through the slit in the observatory roof. Now wholly bewildered and wondering vaguely whether the Martians had struck him down with their insanity ray, Jack wandered outside and looked at the landscape.

The first thing that struck him as he opened the observatory door, was that it had suddenly become warmer, the air feeling as warm as on the hottest summer day. Next he noticed that the sun looked larger and somewhat different in color, being almost white. In dazed amazement Jack got into his car and drove toward the Professor's home. On all sides of him he could see evidences of a great earthquake. Houses had fallen, churches had crashed, telephone poles were down. Everything was in disorder. And here and there Jack noticed little trickles of water that were beginning to run forth as the heavy snows began to melt. Everywhere people were gazing up into the sky, or attempting to salvage their goods from the wreck of their homes. On every tongue was the phrase "The Martians!" for everyone believed that all these wonderful phenomena were due to another attack from Mars.

Jack reached the professor's house on foot, because the road had become blocked by a falling post, and already the water from the melting snows was ankle deep in the streets. The professor's house was untouched by the earthquake except for such minor details as broken furniture, fallen pictures and cracked ceilings. The house itself, like many another throughout the world, was too sturdy to give way before the earthquake.

Professor Potter and his daughter were already up when Jack arrived. Jack was relieved to find that they, too, were mystified as to the cause of the strange phenomena they were witnessing. If all these people could see the same things he saw, Jack reasoned, he could not be insane. Unless, and here lay the uncertainty, unless all of them were crazy. Perhaps the Martians had swept the whole country with an insanity ray that caused the same delusions to occur to everyone.

"Do you suppose," asked Jack cautiously, sensing how ridiculous his question would sound, "do you suppose that we are all crazy, and this midnight sun, this heat wave, and this earthquake are all the imaginings of an insane mind?"

The professor laughed. "I thought of that myself, Jack," he said. "But there is really not much chance that that could be the explanation. You could hardly get everyone to have the same delusions at the same moment. And I'm sure my mind is working too logically to be the mind of a lunatic. No, there must be some other explanation. Where were you at the time it happened, Jack?"

Jack explained that he had been in the observatory, and went on to relate how he had thought he had seen two Martian space ships leaving for the earth, and of the peculiar miniature earth and moon he had seen through the telescope just after the shock. Neither the professor nor Jack could think of an explanation for that peculiar sight.

"If we have been struck by a large body travelling at high speed in such a manner that a slice of the world on which we live has been carried away into space, as happened in Jules Verne's "Off on a Comet," perhaps

that would explain what you saw. Let's tune in on the radio and see whether we are an isolated community flying through space, or a world turned topsy-turvy by the Martians."

Suiting the action to the word, Professor Potter tuned in the radio, and the three sat down to listen. Many of the broadcasting stations of the world had been disrupted by the great earthquake, but there were still many that continued to operate. Hence it was not long before the listening trio began to get news reports from all over the world.

"Great Britain, Germany, Russia, France, and practically every other country in Europe have reported by radiogram that they were plunged into midnight darkness at the same time that the sun became visible here. All report heavy damage from earthquakes and melting snows.—The only theory yet advanced to explain these phenomena is that the Martians have somehow and for some unknown reason turned the earth around, and pushed it nearer the sun. This fails to explain the change in the color of the sun, however. . . . One observatory reports that two Martians space ships were glimpsed leaving the moon, presumably bound for the earth. These space ships apparently failed to reach their destination, for a worldwide search for them fails to reveal their presence . . . . We have just received a radiogram from the Prussian observatory at Berlin. It states that the face of the sky has taken on a most unfamiliar appearance which may possibly be explained by the changed position of the earth, but the astronomers agree that the change must be a great one to produce such a large difference in the appearance of the face of the sky. They are able to

find none of the planets, but in their search for them, they came upon our moon which should have been on the other side of the world. It is now on their side of the globe, and at such a great distance that it looks like another star with the naked eye. The constellations have shifted their positions so as to be almost unrecognizable, and some of them seem to be changing steadily. This is especially noticeable in the case of Canis Major which appears to be receding from us at an unmeasurable rate."

There followed a few detailed reports from large cities that had been especially hard hit by the earthquake, or where the floods from melting snow were largest, but not yet had any explanation been given that seemed reasonable and that explained all the facts. After a short discussion, Jack and the professor went back to the observatory to study the sun.

**T**HE rest of that day, (for the sun set in Medville four hours later, and rose on time the next morning quite as if nothing had happened) and the following night provided the world with many bits of astronomical information from which they were able to piece together a theory to explain what had happened. Jack and professor Potter studied the sun until it went down, and the things that they discovered were interesting as well as valuable.

The first thing that came to their notice when they turned their telescope on the sun was that a small, round body lay between them and the sun. After careful measurements of atmosphere and diameter, and after extensive verifications from other observatories, it was found that the object was none other than our warlike neighbor, Mars, and that further-

more, our sister planet was falling directly into the sun!

This discovery upset the theory that the strange phenomena occurring on our earth were due to the influence of the inhabitants of that planet, for why should they destroy their own home before they had conquered a new one? Surely the Martians would not wilfully destroy their mother planet for the sake of causing an earthquake and heat wave on our earth.

Breathlessly those who owned telescopes watched as the red planet plunged toward its fiery doom. Closer and closer it went, till at last, as a tiny speck, it mingled with the flaming photosphere. Large streamers of burning hydrogen shot forth, and belching flames poured out from the spot that marked the grave of Mars. The red planet, the symbol of war, had met a fitting end!

One result of watching the last voyage of Mars to meet its end was that the sun was discovered to be much larger and much further away than it had been before the earthquake. For Mars had become a tiny speck in the most powerful telescopes before it reached the sun. It was estimated that the sun was nearly five hundred million miles from the earth, and more than five times its original size. Furthermore, when the spectrum of the sun was examined, it was found to contain several lines which could not be identified with those of any known element. Our sun had somehow greatly increased in size and in distance away from us, and had added several unknown elements to its chemical composition.

When the sun had set, Jack and Professor Potter returned to the latter's home, where they were joined by Ann. Late that night, as the three sat

around the radio, listening to the reports of rising floods all over the world, Jack hit upon an explanation of all the strange phenomena they had witnessed that day.

"I have an idea," he said to the professor, after a long silence in which he had been thinking deeply. "And I think it may explain all these strange facts. It seems utterly preposterous and impossible, yet it explains all the facts. It is the only theory I can think of that will explain the miniature earth and moon I saw just after the earthquake, and all the other facts along with it."

"Well, let's hear it," urged the professor. "The whole world is waiting for an explanation of the mystery."

"I really don't know how to begin in order to make it seem as plausible to you as it does to me. You see there are one or two scientific theories with which it disagrees, yet they are mere theories, not proved facts. For instance, Professor, it has always been considered that the speed of light is the ultimate in speed, has it not?"

"Yes, I believe it has. But what has that got to do with it?"

"Everything. Now let us grant for a moment that that theory is wrong, and that it is possible for a body to move faster than light. Granting that, is it not true that if such a body, moving faster than light should approach the earth, it would not be visible until after it had passed the earth?"

"Granting that such a thing is possible," said the professor cautiously, "I believe you are right. A body travelling faster than light would overtake its own light waves as it moved, so that no light from it could precede it. Thus it would be invisible to anything it was approaching. Now what is your theory?"

"I believe," said Jack firmly, "that

a huge sun, five times as large as ours, containing some unknown elements, and being whiter in color than our sun, approached our solar system travelling faster than the speed of light. It crossed over the solar system near the orbit of Jupiter, probably dragging that planet and Saturn immediately into its bosom. Mars, being farther away, took longer to reach its surface. And the Earth was too far away to be dragged into it, but was pulled away from its own sun and is now being dragged after it in a whirlwind rush through space. The moon was pulled after the earth, but the shock of the sharp pull lengthened its distance from its primary considerably. Mercury and Venus were probably too near our sun to be shaken free by the passing of the stranger, and as Uranus and Neptune are now on the other side of our sun, they, too, remained. The earthquake was the result of the new sun wrenching us away from the grasp of our old sun. The heat wave was caused by the fact that for a few seconds we had two suns, and our new sun is larger and hotter than the old one. Have I explained everything?"

"Everything but what you saw through the telescope," said Ann.

"That is easily explained when you bear in mind the fact that the new sun pulled us away from our former position at a speed greater than that of light waves," said Jack with a smile. "I looked through the telescope immediately after the shock, and I happened to be looking directly at the spot where we had been a few seconds before. Consequently I saw the earth and its moon *as it had been* a few seconds before. I was travelling along the path followed by the light waves emitted by the earth and moon, and I was travelling faster than those waves, so

that the further away I got, the younger the earth became. If I had a powerful enough telescope and had gone far enough, I would have seen the earth as it was several years ago."

"But the earth wasn't there when you looked. You were on it, looking back toward where it used to be."

"I know it, but that doesn't make any difference. The fact that the earth wasn't there when I looked has nothing to do with it. The light rays sent out by the earth a few seconds before were still there, and it was those that I was seeing."

The professor thought a few moments. "Yes," he said after a while, "that would explain everything: the large size of the sun, its distance and change in color and chemical composition, the absence of planets, the fall of Mars, the distance of the moon, the earthquake, the heat wave, the unfamiliar appearance of the face of the sky, the receding aspect of Canis Major, and last, but by no means least, the sight you saw through the telescope. Everything, everything is explained. And now that it is explained it seems foolish that we didn't think of it before. It is glaringly evident that we are being dragged through space at a speed far greater than that of light, away from the constellation Canis Major and toward the constellation Lyra."

THE professor helped Jack draw up a written report of his theory to explain the phenomena of the past day, and the next morning it was submitted in full to the Astronomical Society of the World. It was not long before the theory was accepted as the only one explaining all the facts, and once more the name of Jack Newton blazed in the headlines as the hero of

the hour. It was to him that the credit had gone for wiping out the Martians in their almost invincible space ship, and it was he alone who had figured out the explanation of the mysteries that all the world had sought to solve. Jack became the Lindbergh of his day, and sharing his glory, as had been the case with the first Lindbergh, was a girl named Ann.

The years that followed were years of reconstruction and acclimatization for the war-wrecked world. It was not long before a famous brain specialist discovered a ray that restored the numberless paralytics in America to the use of their limbs. It was found that they had been in a state of coma wherein all the organs of the body ceased functioning but the body did not decay. Thus, when their brains were restored to working order, they were found to be uninjured and perfectly normal in every respect. Even those who had been subjected to the fumes of poison gas in the Martian space ship, recovered when put under the ray, and seemed to be none the worse for their experience.

Whole cities, that had been destroyed by earthquake or flood, had to be rebuilt. Everyone worked in the process of reconstruction, and it was amazing how quickly beautiful buildings arose to take the place of the many ugly ones that had fallen. Many a city that had been hopelessly old fashioned before now became a modern, up-to-date community, with beautiful homes, and wide streets. And the process was not hindered by hostilities between nations, for war was abolished for good and all, every vestige of an armament having been destroyed.

Meanwhile the new sun continued to pull the little earth in its wake on its perilous journey through the



depths of the universe. Straight for the ring nebula in Lyra the sun headed. On the face of the evening sky, the ring became distinctly visible to the unaided eye. It grew in size and brilliance till it surrounded the horizon, being visible by day and night. The star that marked its center grew into a flaming orb that added its heat to the heat of the sun. Then came the crisis. The speeding sun that drew our planet passed close to the star in the center of the nebula. There came an instant of great heat, then we were past, the star dwindling in size and brilliance, and the nebula shrinking away to invisibility as the light years of distance between it and our sun increased.

That was as close as our sun ever came to a collision with an inhabitant of our galaxy. It forged steadily among the lone stars in our portion of the sidereal universe, travelling at a

speed that could only be roughly estimated at several thousand times the speed of light. After eight years it passed the outermost boundary of our galaxy, and sped out into open space with nothing before it and our galaxy rapidly dwindling to nothing behind it.

The rest of this story lies in the future, and only the future can reveal what it will be. No one knows from whence came the swiftly moving sun that saved the earth from destruction, and no one knows whither it is bound. Will it go on forever, speeding through empty space throughout eternity? Will it come upon any more island universes and plough its way through uninjured? Or will its end be that of a collision with another gigantic sun? No one can tell, least of all an humble historian who relates nothing but plain facts in as straightforward a manner as he can manage.

THE END



# DISCUSSIONS

In this department we shall discuss every month topics of interest to readers. The editors invite correspondence on all subjects directly or indirectly related to the stories appearing in this magazine.

## A Pleasant Letter From an Etymologist. Interesting Notes on Origins of Words.

Editor, AMAZING STORIES:

Thanks for your friendly letter: I have been noting your friendly attitude in your printed responses to offerings.

I do not regard dates as of the slightest importance, not living under the time scheme, except accidentally, as when a scheduled departure must be taken. 1215 equally applies to the first reforestation program in Europe (in France) as to King John's submission.

Excuse the former worn ribbon—short of funds and had no replacement on hand.

The "retarded mentality" comment was generated by a neighbor, and your misprint merely drew the spark. (Sorry but the proofreader did not type for you, in your selfmade letter "comparitively"). Criticism can be helpful if accepted in a constructive spirit.

I had forgotten the Latin "conor" and your mention of it interested me. Such word-memories should be kept alive: 'tis little enough power for beauty words have.

Loomis is from a bastard name in bastard Latin-Hebrew, Lum-algae, of which the Italian Lumalghy is a branch recalling the original pronunciation. It said: "from the loam of a Roman in a Hebrew Temple Grove (churchyard)" and implies the rape of a rabbi's daughter, because rapes of commoner women excited no particular animosity in those days. In England it ceased as the deed name, was latinized to Lumalgus, and was mispronounced by Norse influence Lumaulghs, which the Anglo-Saxon converted into a place name, Lum-hals, or "elm-vale" (the el-lum being the looming or high tree of pastoral valleys). It became an occupational name under a draper who first spelled it as now, the "oo" associated with that in loom, the instrument of weaving. Battell is the English modification of the French "Bataille" and I assume at source the bearers were battlers. Huxley mentions one of them in "Descent." Charles, of course, is both churlish and noble—Teutonic, I half recall. Account my churlishness to that—or

maybe to arthritis—hard to tell. You are getting out a most interesting magazine.

(C.) BATTELL LOOMIS,  
Manhattan Beach, Calif.

(You remember what Mark Twain said about Chaucer to the effect that he had genius but couldn't spell. The latter seems to be one of the writer's troubles, but unfortunately the first part of it doesn't apply. The name O'Connor is the anglicizing of the Celtic name in which the "O" stands for "Uaigh" meaning "descendent", coming curiously close to the Greek word "uios" meaning "son." Misspelling of the printed word one always lays to the printer or proofreader, but when it comes in typescript or manuscript there is no begging off. The Celtic word for "black", "dubh" pronounced "dov", would do for the first syllable of "devil", but the Celts beat that with their word "diabhail" coming very close to the Greek "diaballo" "I throw down" and other disagreeable things. We shall hope to hear from you again even at the expense of a break in our etymology or orthography.—EDITOR.)

## Another Letter From a California Correspondent Touching on Geology.

Editor, AMAZING STORIES:

Back again, after a long vacation to Montana, ye olde home state, and I am now faced with the task of getting a hopelessly snarled correspondence into working shape. At the station, while waiting for my lunch to be served I saw a magazine in the top corner of the news stand with a very good looking cover. Suddenly I gave a start, for it was, none other than AMAZING STORIES! I didn't think it possible, for after the SUPER lousy cover on the August issue it didn't seem that such an improvement could be made.

Glancing through "Discussions" (which is the first thing I do with a new stf. mag) I read a letter that sounded familiar. This time I fell off the stool, for I saw that it was MY letter! Two in a row was, and is, too much for me, so I cleaned my glasses to make sure. You'd better not publish this one or I'll have a heart attack.

After reading a little of the mag I became conscious that some one was off somewhere. I humbly suggest that you get your cover and your interior to agree. On the cover the story "BEFORE ATLANTIS WAS" was announced, while in the interior and on the table of contents is labeled as "WHEN ATLANTIS WAS!" Now, which is right? Personally, from the gist of the story I am inclined to believe that the cover title is correct. And that brings me to a point in the story, which conflicts with what I have been taught. Mr. Arnold (by the way, who is this Arnold, can't recall ever seeing him before) places the time of the story at approx. 50,000 B.C., and mentions that the age of mammals is just beginning, and that *probably* all the reptiles are extinct, with the possible exception of the Try—Rex (too lazy to look up spelling). NOW, in my school work I have been taught that the Age of Mammals began with the Eocene Period, 12,000,000 years ago. The last reptile had to be extinct by the early Miocene, 7,000,000 years ago, or otherwise several hundred scientists are crazy. In the late Pleiocene (2,000,000 years ago) the first men branched off from the rest of the Apus Groundia (or something like that) and in the middle Pleiocene period, 50,000 years ago mankind was a very distinctive type of animal, already having crude tools and the like. Outside of that the story is good, so far.

Here are the ratings of the issue as far as I'm concerned. (1) Before Atlantis Was. (2) On the Planet Fragment. (3) The Fireless Age, which incidentally could do with a sequel, and (4) The Last Ice . . . . The poem was O.K. for those who like poetry, though I wouldn't miss it. The editorial was good, as it always is, and on the whole the issue was better than the August one. AND, thanks for printing that second letter.

T. BRUCE YERKE,  
660 N. Mariposa Ave.,  
Los Angeles, Calif.

(Do not be too sure about the geologic ages. Geology, it is fair to say, is far from a mathematically correct science. It is not long ago since the Plutonian and the Neptunian Schools of geology were in active and open warfare with each other. The "king saurian tyrant" seems to have been a very terrible fellow, the *Tyrannosaurus Rex*. —Editor.)

#### A Pleasant and Valuable Letter From the Penobscot Shore.

Editor, AMAZING STORIES:

My first encounter with AMAZING STORIES came, quite accidentally, in a bookstore where I had come looking for another maga-

zine. The desired periodical was there, I believe, but as I was about to purchase it my eye was attracted to a rather lurid appearing magazine with a cover illustration consisting largely of an eye-searing array of multi-colored vacuum tubes. I was immediately fascinated and, much to the disgust of my father and (I suspect) to the covert amusement of the clerk, I squandered the requisite "two bits" on this dubious publication, and quite ignored the one I had originally intended to buy. All this was nearly ten years ago and the magazine I bought was the July 1927 issue of AMAZING STORIES.

I had had some slight experience previously with science-fiction, the first story that I remember was entitled "The Flying Sub," and appeared, oddly enough, in a Sunday school publication. The above, however, was my first discovery of a magazine devoted entirely to science-fiction and I was converted to the cause on the spot. With the exception of a few scattered issues I have read AMAZING STORIES ever since. But I ought not to be boring you with this dull account of my childhood misadventures; the important point is that during all this time I have found no real cause for serious complaint.

This being the case, I see no valid reason for writing this, my first letter to you. Nevertheless, I am, and from the appearance of the preceding paragraphs, I fear "this here 'pissle" is going to be a long one.

Your science editorials are one of the best parts of the magazine, and this statement is by no means derogatory of the stories themselves. I particularly enjoyed the article on "Measures and Weights" in the February issue. The inconsistencies that lie (no pun intended) in these most fundamental concepts were well brought out. If I may indulge in a little figurative hair-splitting, though, I should like to point out a minor inconsistency which was overlooked in the article. I refer to the statement that the gram, a unit of the scientific (?) metric system, is taken as the weight of a cubic centimeter of water. This is slightly in error, as the gram actually is the weight, not of a cubic centimeter, but rather of a *milliliter* of water. And there is a difference between these two metric units of volume. From that "Chemists' Bible", *The Handbook of Chemistry and Physics*, we may find that  $1 \text{ cm.}^3 = 0.99997 \text{ ml.}$  and conversely  $1 \text{ ml.} = 1.000027 \text{ cm.}^3$ . As a consequence a  $\text{cm.}^3$  of water weighs but 0.99997 gram. Evidently when the standard kilogram was prepared it was found easier to make the unit fit the standard than *vice versa*. This discrepancy gives rise to two distinct tables of metric volume. One, the

liter system, used for liquid measure, is based on the standard kilogram, while the other, or cubic system, is based on the standard meter. The definition of the meter as one ten-millionth of the earth's quadrant is, of course, notoriously inaccurate, and the standard is now checked against the infinitely small as represented by the wavelength of the "red cadmium line" of spectrometry.

In your editorial, "Waves," the distinction is nicely drawn between the longer radio broadcast waves and the ultra-short "Hertzian" waves. The present-day strivings of radio engineers to perfect communication on wavelengths below 10 meters compare oddly with the earliest experiments of Hertz, whose classical demonstrations involved "damped" waves of 3 to 10 meters length.

In regard to the stories, my only kick is that there are not enough of them. Need it be said that I live in constant hope of a return to monthly publication and a revival of the Quarterly? "By Jove" promises to be the best serial you have published in a long time. Dr. Rose's pungent (bad puns are my specialty, too) humor makes the yarn one of the most entertaining I have ever read. Campbell's "Uncertainty," too, was well above standard. Some of your correspondents, I note, compare it unfavorably with his earlier "Invaders From the Infinite". I, personally, prefer his shorter works to those super-extra-galactic epics. "When the Atoms Failed", "Beyond the End of Space", "Battery of Hate", and "Mother World" are my favorites.

The short stories by Dr. Breuer and Stanton A. Coblentz are uniformly good, but neither are at their best in them. Put them to work on full-length novels, though, and I'll wager either one would produce a classic. Witness such yarns as "Rays and Men", "Paradise and Iron", "The Birth of a New Republic", "After 12,000 Years", "The Blue Barbarians", and "The Man From Tomorrow". And then there's that early gem of Dr. Breuer's, "The Riot at Sanderac", which for sheer power of description I don't believe has been equalled before or since.

The appearance of a story by Stanley G. Weinbaum in the April issue came as a complete surprise. It is truly unfortunate that his first appearance in AMAZING is probably his last in any magazine. The story, like all of his, is perfect.

Though I do not care greatly for most of Fearn's work, I did enjoy two of his: "The Intelligence Gigantic", and "Liners of Time". The sequel to the latter will be welcome. Mr. Fearn admitted in his reply to "Wild Bill", that he did not strive for scientific plausibility in his stories. For my

part, I've no objection to the use of scientific impossibilities in stories where the science is plainly subordinate to the plot and action. But Fearn persists in making science the be-all and end-all of his stories and his science, alas, is almost invariably "screwy". He makes up for his scientific derelictions, though, by being a good story-teller.

Is there any news yet from Cyril G. Wates? A year or so ago he promised us a sequel to "The Visitation". Unfortunately I missed the latter story, but I have read and enjoyed others by him. I particularly remember him for "Gold Dust and Star Dust" and "A Modern Prometheus". I suggest that, if and when you receive the sequel to "The Visitation", you reprint the original story together with its sequel.

Well, I see I have made up my ten year silence by making this letter ten times as long as permissible, hence I must close ere its length become infinite and the editorial patience zero (the Fitzgerald Contraction, you know). I will write again, though, sometime during the next ten years.

NORMAN F. STANLEY,  
48A Bavad St.,  
Rockland, Maine.

(We must apologize for the delay in publishing your very interesting letter. All we can plead is that accidents will happen. If we have the good fortune to receive as good a letter from you again, it will not suffer such delay in publication.—EDITOR.)

A Letter From One of Our Youngest Readers; Perhaps From the Youngest.

Editor, AMAZING STORIES:

I have just purchased the December issue and while glancing over "Discussions" I found a letter by a certain twelve-year-old named Thomas Carey who thinks he is your youngest reader. I'm sorry to spoil his hopes, but I think I am your youngest reader because I am only ten years old. I have not read your December issue, but I think it will be very good. I liked "On the Planet Fragment," by Neil R. Jones, best in the October issue. The best stories in the August issue were "Cupid of the Laboratory", and "Antares Tryst". Although your magazine is the highest priced in the field, the quality of stories makes up for it.

RAYMOND BARRY,  
1303 14th St.,  
Bradenton, Florida.

(Your letter is appreciated highly by us. It is clearly written and on one side of the sheet. To us oldsters it sometimes seems as if the younger generation were running away from us.—EDITOR.)

**More Stories Per Issue Asked For. We Have Hopes For That Ourselves. Errors Will Happen in the Best Regulated Families.**

*Editor, AMAZING STORIES:*

I just wanted to tell you that you have the honor of being the editor of the best Science Fiction "mag" on the market today. So much for that. Oh yes you have a misprint on the cover of the 1937 Oct. AMAZING, on the cover it says "Before Atlantic Was" but inside it says "When Atlantis Was." How about some more stories by Harold S. Sykes and H. F. Arnold?

I like AMAZING because of its superior stories, but how about more stories per issue? Your covers are exceptionally good and should receive more praise than they do. The "Myriad" is I think the best story in the latest AMAZING and I would like a few more similar articles. How about some correspondents in Dear Old England (I am a Canadian from Toronto, but have been in Florida over a year, I don't think much of it).

Don't forget, England, I am expecting to hear from you soon.

BILL TOWNLEY,  
834 North Halifax Ave.,  
Daytona Beach, Florida.

**An Encouraging Letter and an Editor Certainly Needs a Little to Help Him Through.**

*Editor, AMAZING STORIES:*

This is the first time I have ever written to any magazine but when I read your mag I just couldn't resist. Boy, I have read many a magazine but never such a one as yours. It is "super-gom-sloptious" (swell to you). It has all the makings of a perfect mag, a swell cover, superb stories, and the best of departments. (Whew, I've run out of adjectives.) There is only one fault that I have found and that is that it isn't a monthly. But make it a monthly and you will have at least one person who will say it is the best mag on the market.

I think what inspired me to write this letter was H. F. Arnolds' "When Atlantis Was". My father, being in the Navy, and Arnolds' story being about the Navy made me read the story and I'm anything but sorry I read it. It is the best story I have read in many moons. "The Myriad" comes next, and then Binders' "Blue Beam of Pestilence" was good also. My main interests are mathematics, radio, and chemistry.

I remain a faithful reader as long as your mag keeps up the good work.

JACK HALL,  
c/o Lillian Layne, 507 Stuart Circle,  
Richmond, Virginia.

(If there is anything the Editor of a magazine needs it is the encouragement that is given by appreciation expressed by readers. We thank you sincerely for your commendation and hope to give more stories equal to the "Atlantis" yarn in the near future.—EDITOR.)

**An Interesting Letter From Holland. We Have Received Few or No Letters From This Country.**

*Editor, AMAZING STORIES:*

First of all I must apologize for my broken English (most probably it can't be considered as English at all!). As I've got no dictionary with me, I have to write the next few words all by heart. The reason why I am writing to you is, because I suppose you might appreciate to receive a letter from one of your readers in a foreign country. This time not from England, Canada or Australia or some other English-speaking country, but from Holland. Though I don't write your language very well, I'm quite able to read your AMAZING STORIES, which I enjoy thoroughly! Particularly when they aren't "interplanetary", because in my opinion A. S. contains too many stories treating of interplanetary matters. Which doesn't mean that I ever jumbled such a story!

As I'm studying at Delft Technical High School (probably not unknown to you; we are suggested to be undergraduates of a world-famous university) I'm interested in science and during my free time naturally in science fiction, too. That is why some of my friends and I always secure your magazine which is obtainable at almost any book-stall in the Hague, and in Delft. I remember some years ago when I was still in the Colonies, A.S. was also obtainable in Batavia (capital of the Dutch East Indies), though not so easily as here. You see, Mr. Editor, your magazine is really read the world over. I would like to avail myself of this opportunity to enter into correspondence with American or other undergraduates to compare our students life with theirs. My age is twenty-two.

A. 'T HOEN,  
Electrotechn. Stud.,  
v. Beverningkstraat 44,  
's-Gravenhage, Holland.

(The Editor of AMAZING STORIES has most delightful memories of Holland. On one trip he bicycled through it, coming from England to Flushing and then going north and back on the west of the Zuyder Zee. On another occasion he went through it by auto. But the bicycle is the vehicle for your country. It is a sort of puzzle to us how we receive so many letters from the Antipodes,



Australia, New Zealand, as well as from Europe. We shall always be glad to hear from you.—EDITOR.)

### A First Letter to AMAZING STORIES. We Hope Not the Last.

Editor, AMAZING STORIES:

This is my first letter to you though I have been reading your magazine for some time, so I hope you will print it, but let's get down to business. "Maybe or maybe not" some of you old age pensioners will remember stories such as "Spacehounds of the I.P.C." and "Space Eternal". So much for the old stories, but let's look into the new, for I am looking at the June number, a recent copy.

I have just read J. Wm. Skidmore's "Murder by the Atom", and may I compliment him on a story which is worthy of acknowledgement. "The Crystalline Salvation" seems a little far fetched but it is interesting, and the magazine has been going so long I should think the authors would have run dry.

But if you read the August edition you will find I am wrong for I want to congratulate W. Lemkin, on his finest story, "Cupid of the Laboratory," for who knows how life began. Other great stories are, "The Fireless Age" and "Daughter of Luna". I also think "Death in the Stratosphere" was an exciting story. Well, Ed., I will close now but if there is any criticism in this letter I deeply apologize. By the way if anybody wants a pen pal, about seventeen or nearly eighteen, I would appreciate any letters so don't be scared. Well, so long, "Ed.", you keep the mag going, and I will see if I can spread the news of the mag to my pals. Well, as we say in Yorkshire here "Au Revoir". I would be glad if the Editor would give me his idea of what electricity is.

J. JOE WRIGHT,  
98 Bruce Avenue,  
Mount Vernon,  
Barnsley, England.

(Your letter we may term jolly. We would be glad to receive more like it. You will probably get some pen pals by this very characteristic letter. The writer of these lines is definitely sure of one thing. He does not know what electricity is and believes that no one else does.—EDITOR.)

There is an Excellent Suggestion at the End of This Letter. We Shall Hope to Carry it Out.

Editor, AMAZING STORIES:

I have just bought the December issue, and it is quite up to your average, if not perhaps an immortal number. I did not

begin reading scientification—oops!, pardon me, science fiction—until 1934, but in shopping around in Boston second hand magazine stores I have acquired about 90 of the 120 odd issues of the magazine, including the Skylark series, so I may lay claim to being familiar with both past and present AMAZING. Not being Sanford Lee's equal, I have not yet got around to reading all the future issues, hence I am unfortunately unable to give you my opinion on them.

There is one thing, however, which I may state. Only two science fiction magazines are now existent (phantasy—phooey) and I find when I read AMAZING after reading the other, I have a curiously relieved and thankful feeling, as one who encounters a serene blue sky after a harsh mixture of greens and reds on some alien planet. The other magazine is superior to our one and only in practically everything but the editorials, yet I still prefer AMAZING for some peculiar reason. Atmosphere, tradition, etc., are all behind you, and give you that flavor which alone entitles you to your aristocratic title. Peace be with AMAZING in its old age, and maybe there is something in that rejuvenation thing after all!

That's not what I started to write you about, though: sorry!

Now what I was going to say is this: The "Discussions" columns are getting too insipid. Shades of Dr. Smith and the famous little red spiders! What you need is a lot of provocative topics for your readers to disagree about. There are a lot of people who simply *must* have something to argue about, and by giving them an opportunity in your pages, you please them, save the nerves of their friends and relations, and amuse your other readers no end. I'm quite willing to do my part to the best of my limited abilities.

FOR EXAMPLE, I think it would be a good idea for you to print one story per issue with a blurb alongside stating "This story, which we know our readers will enjoy, was written by one of the following ten popular authors (giving list). We invite our readers to send in letters to "Discussions" stating which particular author they think wrote the story and why.

And if you don't like it, fellow discussers, why, step right up and roll your own!

If anyone wanting back copies will write me I can probably obtain them very cheaply and will be glad to sell for cost and postage.

LOUIS R. CHAUVENET,  
Matthews 59,  
Cambridge, Mass.

(We have been printing stories by comparatively few authors, with the general idea of giving the best, and we have certainly sometimes at least approximated that re-

sult. Even if we did not publish the names of authors in most cases their work would be easy to recognize so many of them are in order of sequence. But your suggestion is so good that we shall certainly try to carry it in this or the next issue of **AMAZING STORIES**.  
—EDITOR.)

**A Letter From the State of Washington. It is Sometimes Hard to Distinguish it From its Namesake on the Potomac. Perhaps That Ought to Read the Other Way.**

**Editor, AMAZING STORIES:**

This is my first letter to a S.F. magazine, although I am by no means a new reader of your fine magazine. I am writing this in appreciation of the fine stories you have been publishing. Your magazine always contains original and entertaining stories. I will list a few of those I think were best.

"The Space Marines and the Slavers" by Bob Olsen was very good. I have not seen much of his work lately. More please. "Uncertainty" by John W. Campbell was a bit too technical, but interesting. "Planet of Perpetual Night" by John Edwards was very entertaining. "Prometheus" had a good surprise ending, by Arthur K. Barnes. "Twin Worlds" by Neil R. Jones was entertaining. "The Chemical Murder" by Eando Binder was fine and had a good illustration by Morey. Your magazine showed its fine standard by procuring one of Weinbaum's last stories "Shifting Seas". "Murder by Atom" by Joseph W. Skidmore had a good plot, but was not as well written as some of his stories. Glad to see J. Lewis Burtt in the magazine. His story was not as good as those in his Lemurian series. "Cupid of the Laboratory" by William Lemkin was swell. I like novel and humorous stories. More of this kind please. "Fireless Age" by David H. Keller did not seem typical of him. However, **MORE STORIES BY KELLER PLEASE!** If not I'll turn my Martian ape loose on you. He likes Keller, too.

I see that you have instructed Morey to take more pains with his art work. Good. I know that Morey is a great artist as evidenced by his fine covers and drawings in the past. The only good cover this year was the one for "Twin Worlds," simply because he took his time and blended his colors well. Morey is a true S.F. artist.

This, coupled with your fine stories, would make your magazine a work of art. And maybe even (I'm praying) you could trim your edges. But all these things happen only in my dreams. Oh well, Heigh Ho.

I haven't seen many letters from Spokane in Discussions. This should not be. I would like to get in touch with S.F. fans around eighteen years of age in Spokane. It gets

mighty lonesome with only my magazines to talk to. Maybe we could form a club and see that our city is represented in "Discussions" more often.

I am desirous of procuring original drawings by the famous S.F. artists like Morey, Paul and Wesso as I am making a collection of them. If any of you fans know where I may obtain some of them please write to me. I would probably have to trade articles for them. Maybe I have something you desire.

By now Mr. Sloane, you can see that I like your magazine. Here's hoping for an artist to help Morey out, and **MORE STORIES BY KELLER** and old authors like Clark Ashton Smith and Harl Vincent. As this is getting much too long, I will close. If this is published I will try to write often. Does this magazine consider work of aspiring authors?

ALFRED H. BOWLES,  
4208 N. Walnut,  
Spokane, Washington.

(Your letter tells its own story very well. We will soon have more Keller stories. You do not like him any more than we do. His work has recently been taken up in France, which is a fine tribute. The writer is in expectation of a call from Harl Vincent, any day and this may have results. Do not let this be your last letter to us. Send us your story.—EDITOR.)

**The Skylark Stories Asked For. This Is Only One of Several Correspondents Who Want Them.**

**Editor, AMAZING STORIES:**

Please advise me where I can get the "Skylark" Stories.

I have them in old **AMAZING STORIES** up to "Skylark III." Want the rest.

Also, can I get the "Skylark" stories complete anywhere?

Or will you do *all* your readers a favor and re-publish your stories (Skylark) or put them out in some special form?

They are the *one* set all your readers did read, whether they approved or not.

R. S. CHAMBERLIN,  
Dalhart, Texas.

(Write to the following correspondent.—EDITOR.)

**Back Numbers of AMAZING STORIES For Sale As Well As Many Others, and Also Books and Articles of Interest.**

**Editor, AMAZING STORIES:**

May I offer my congrats for a great June Number, why even Morey seemed better, and the stories are just great. I bet if you were to put a different name on Morey's

drawings the so-called "Art Critics" would say it's better or worse than what Morey did. Put a different name on a thing and though it's the same it's different from the thing that was, before it was different. (I hope that gives the critics a head-ache.)

Reading the "Discussions" leads one to think that the major part of your readers are set loose bi-monthly. I want a clear cover! Why don't you trim the edges? Why don't the Editor edit? Why do you charge 25 cents for your mag? Why! Why! Why! Why do people ask such silly questions? I suggest that they all be sentenced to one (1) year as editors. That should reform them or more likely they would be back in their cells well before the year is up. Don't you think so, Ed?

Need I say anything about the editorial which is better than it ever was if that is at all possible. I sometimes wonder why you don't write a S-F story yourself, you seem cut out for it if your editorials are anything to go by, and I believe that they are.

I had been asked by the parents of one of my late friends to reply to some letters which were sent to him but owing to the large number I am asking you to grant me space in your mag of which he was a reader.

S. Sparks of Westminster, London, passed away July 1936—Requiescat in Pace.

Will his late correspondents please note that no letters can be replied to?

Also Tony Brooks cannot answer any letter yet, gone abroad to study. He will reply to all correspondents as soon as he has settled down. Arthur Parkes is still alive and will reply to correspondents or friends old and new, young and old, has same address: 16, Hawgood St., Bow, London, C.3, England. Thanks Ed.

I note that some readers in England have difficulty in getting the 3 S-F mags, so it may interest them to know that there is a league devoted to getting these mags for its members of which there are 127 members to date. The dues are 1s. for each member to join and 6d every year after. Each mag cost the members the sum of 8d which is for postage, packing, etc. Non-members can get numbers for the sum of 10d post free. Stamps, mags, books, etc., are sold or exchanged through the League.

We still have a few copies each of the following for sale to non-members, all in good condition: AMAZING STORIES, Dec. 1935; Jan. to Aug.; Oct. to Dec. 1935; Feb., April, Oct., Dec. 1936; Feb., April, June 1937. Also other science mags. We also have 3 copies only of "The Wonderful Story of London" as it was and is. This book has over 500 pages all about London and is good interesting reading for all ages and all

classes. Will take the best offers. What about you, Ed?

This letter seems to be getting into an advertisement so I'll close. I thank you if you put this in your/our mag which I find helps one to understand the funny words of the English tongue. And now as I seem to be writing for everyone, I'll sign myself off.

A. PARKES,  
Vox Populi,  
Poplar, England.

(There are two kinds of advertisements—one the regular kind put in for the benefit of the advertiser, the other for the benefit of the reader; the latter is the rarer of the two. So we have it that this shares qualities of both kinds. As for the Editor writing a story we have to take care of our contributors and give them the preference. —EDITOR.)

A Nice Letter from an English Reader, Who Comments Favorably on AMAZING STORIES.

Editor, AMAZING STORIES:

This is the first time I have written to your magazine; you do not know how much we appreciate your book over here. I obtain my copy from your agent over here in England, and I read it until it is finished from cover to cover. I think your critics are too harsh, admitted there are some faults, but nothing is perfect. Taking it all around I don't think it could be much better. You have often wondered why you receive kind letters from English readers. I think it is because your American readers live in a land of plenty, and treat them as everyday commodities while we have to rely on our "Yank Mag." stalls. It is amazing to see my English brethren write "swell", "lousy", "not so hot", and an American Editorial foot note saying "We do not understand flicks as a word." I should like space travel stories of the type of several years ago, food, fuel, planets and the like. Could we have a story featuring television as its theme? It is pleasant to read stories by our J. R. Fearn. He has had increasing popularity. If any reader has mags for 1927-1929 I should like to communicate with him with a view to purchase them. I agree with you when H. G. Leeds of Manchester says he lends his copies; borrowers are not true readers if they do not buy their own copies.

R. WAKERLY,  
74 Crummock Gds., Kingsbury, N. W. 9,  
Middlesex, England.

(We often have to say that a letter speaks for itself, and that is what the above letter does. We can only thank our English correspondent for his appreciation, which we shall endeavor to deserve in the future. —EDITOR.)

### A Very Interesting Letter in Which a Bit of Scolding Is Nicely Administered.

Editor, AMAZING STORIES:

"Yet once more, O ye laurels, and once more  
Ye myrtles brown, with ivy never sere,  
I come to pluck your berries harsh and  
crude,

And with forced fingers rude

Shatter your leaves before the mellowing  
year."

The above quotation is designed to put you in a good mood as I have several complimentary things to say to you.

Firstly, you stand accused of pandering to the taste of ten-year-old children rather than adult readers. I have seen one periodical already develop into a Science Fiction Primer but I never thought to see a magazine with AMAZING's traditions come to such an ignominious end. Such stories as "Blue Beam of Pestilence", "Zagribnd" and "The Last Ice" have no place in a respectable magazine. Up to now, your serials have remained free of the juvenile taint but Fearn's latest horror brings them down to the level of the other stories. I admire your nerve in describing him as a second H. G. Wells!

In the current issue, Olsen's poem is a slightly-altered reprint and the Ye Doe's book-review is a word for word crib of Mr. Brandt's in the August issue! How do you account for this? And how do you account for the absence of the drawing for the serial?

Which brings me to Morey's, generally poor, interior illustrations. Where is that other artist you mentioned a few years ago? I don't want to disturb the placid workings of your editorial system, but do you think you could produce him within the next decade or so? Morey's covers vary between quite artistic efforts (February and April for instance) and such rags as the June cover. By the way, Dold is doing very little and Paul no, stf. illustrating. What about securing those two masters?

Not all of your stories have been poor. To be honest, I must congratulate you on such stories as "Lavium Under the Sand", "Council of the Drones", "Uncertainty", "Death Creeps the Moon", "Prometheus", "The Fireless Age", and "Cupid of the Laboratory", stories worthy of the Aristocrat of the S-F. The latest serial, "When Atlantis Was", was also quite enjoyable. Keep the rest up to this standard and you'll have no trouble in recovering your place at the head of the S-F world.

I have no patience with those FAITHFUL fans who, while the magazine is doing well, fill the letters department with sycophantic praise and then desert it when it falls on

bad times. Until you become a fairy-story magazine, you can rely on my support.

I don't suppose you will print the above, but please print the following paragraph as soon as possible.

I would like correspondence with any fan interested in the literary (as opposed to the scientific) side of fantasy or those interested in poetry. English correspondents are especially desired but those farther afield are welcome, also.

Best wishes for the future.

Yours sincerely,

S. YOUNG, JR.

(You will let us congratulate you on your evident admiration of Milton. We wonder if you ever heard it said that a person who did not like 'Lycidas' had no liking for poetry. Your quotation is certainly an epitome of your letter. If you felt about H. G. Wells as the writer of these lines feels, the comparison of Fearn and Wells would not affect you so painfully. We have to let our readers sit in judgment on our writers, and Fearn has pleased them. We thank you for declaring that not all of our stories have been poor. We have to judge by what we hear from our readers, and it is a positive gratification to hear from them in commendation of what the magazine gives them. We have so many correspondents in Discussions and elsewhere that each day we can say "To-morrow to fresh woods and pastures new."—EDITOR.)

### The Address of an Interplanetary Society Asked For.

Editor, AMAZING STORIES:

I have been a fairly constant reader of AMAZING STORIES for the past eight years. The pleasure and stimulation these stories have afforded me have been far out of proportion to their cost. Especially have I enjoyed the interplanetary stories; the prospect of interplanetary travel is a most intriguing one.

Is there in existence an interplanetary society or an organization in this country devoted to the problem of interplanetary travel? If you know of such, I should greatly appreciate whatever information you can give me on the subject.

PAUL SHILDNECK,  
1335 N. Monroe St.,  
Decatur, Illinois.

(We do not believe in the possibility of interplanetary travel, but the subject has given many good stories. Perhaps some of our readers can answer this query.—EDITOR.)

**A Genuinely Appreciative Letter.** As For the Portrait We Will Consider That. Suppose Our Other Correspondents Wanted It, We Would Have to Open a Portrait Gallery.

*Editor, AMAZING STORIES:*

I am one of your many (I hope) admirers. I read each editorial in your magazine as well as everything else, and have made a reference list which I use in my high school chem. class. Having come in contact so much with your name, I have done a great deal of wondering as to what you look like and so forth.

Therefore, if an editor has such a thing as spare time, would you please use the enclosed stamp and write me, telling me how you happened to become the Editor of *AMAZING STORIES* and a lot of other things that are none of my business. A snapshot with your name across the bottom, would overwhelm me. Keep up the good work and I hope that *AMAZING STORIES* does not depart from the newsstands.

DON GUNN,  
1615-15th Street,  
Oakland, Calif.

P.S. Keep Morey.  
P.P.S. Keep N. R. Jones.

(It is hard to tell how you fall into anything in business and professional life. We have served as editor on a number of periodicals, and have been on *AMAZING STORIES* from its first issues. *AMAZING STORIES* is not going to depart from the newsstands. Your postscripts are highly appreciated.—EDITOR.)

**An Apparently Sarcastic Letter, But Who is the Victim We Wonder.**

*Editor, AMAZING STORIES:*

In my usual spirit of service, I here offer a time-tested and unfailing method of getting a letter published in the "Discussions" Columns of *AMAZING STORIES*.

1. Start your letter with a compliment. It does not matter so much whom or what you compliment, as long as it directly or indirectly refers to the magazine. A good plan is to rave about the cover. If it contains a hodge-podge of blues and greens splattered together, compliment the artist on his originality; if not, say it is done in good taste. A successful variation of this is to say that this is the first letter you have written to any magazine. This immediately puts the editor in a receptive frame of mind, and gives him a feeling of importance. But above all, give the editor the impression that you think his magazine is tops.

2. Next, mention several articles that appeared in *AMAZING STORIES* several issues back. This gives the impression that you are a regular reader. If you can think of any stories that were published several years ago, good. If not, merely say that you think the stories of former years do not compare with those of the present. Above all, make the editor think you are a regular reader.

3. Make a suggestion for improvement. Regardless of whether you consider the magazine perfect or beyond improvement, offer a suggestion. This usually takes the form of a request for trimmed edges, larger pages, monthly issues or the like. But remember, make the editor think you have the progress of the magazine at heart.

4. Knock something! While at first this may seem a contradiction of our former suggestions, if skillfully done it will sidetrack any suspicions the editor might entertain about the sincerity of your compliments.

5. Close your letter with another boost. This leaves the editor in a pleasant frame of mind and will make publication practically certain.

If these five points are closely followed, any person can be reasonably certain of getting a letter printed in "Discussions." It's a sure-fire thing—people are doing it every day! So sharpen your pencils, oil your typers and fill the Editor's mailbag with psychologically-written letters. And if your first try is rejected, go over these points and try again. No doubt you failed to closely follow our suggestions!

A Faithful Reader of Your Great Publication (Point No. 5).

WILBUR W. CLOSE,  
308 Harrison Street,  
Cumberland, Maryland.

(There is no doubt that the preceding letter is written by the Editor-in-Chief of "The Free Lance Journalist" of Cumberland, Md. We hope that he will send us a copy. His Journal might be worth reading, if he keeps up his spirit of sarcasm to the degree evidenced in this letter.—EDITOR.)

**Back Numbers of *AMAZING STORIES* for Sale.**

*Editor, AMAZING STORIES:*

I have all *Amazing Stories* from January, 1933 to date which I would like to sell. I also have other science fiction magazines, so that altogether I have about 120. I have been reading "our magazine" since 1932.

EARNEST ONEY,  
617 Harriet Ave. W.  
Wellington, Ohio.



## A Science-Fiction Convention.

It seems that at last science-fiction is to have its first large convention on a world-wide scale. After having been in existence in a specialized form for roughly twelve years from the start of the first AMAZING STORIES of April 1926, the readers, writers, and collectors of scientific fantasies have decided to get together for a grand meeting.

The occasion will be the summer of 1939 coinciding with the New York World's Fair of that year. The exact date and place is as yet undecided. The convention was first promulgated and outlined by several of the members of a New York science-fiction club at the Second Eastern States Convention held in that city early in 1937. At that time, a committee was appointed headed by Donald A. Wollheim to arrange for this World Convention.

As time goes on, plans for the affair seem to grow more and more promising. Pledges have come from outstanding writers and enthusiasts in all parts of the United States and Britain. Readers and writers from such far-off sections as Los Angeles, Denver, Oklahoma, Alabama, Vermont, London, Yorkshire, and other regions have stated their intention of being at the meeting in '39.

It is probable that the Convention will last about three days. During these days it is hoped to present such varied interests as lectures and debates by authors and editors, displays of science-fiction collections and rarities, visits to offices, special showings of old and famous motion pictures, possibly a special performance at the Planetarium, not to mention the World's Fair itself.

Those who are interested are urged to watch their science-fiction magazines for further announcements.

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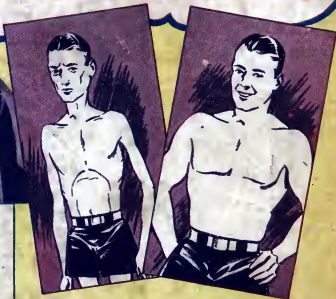
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